[illegible] boost, EMC debuts two new arrays ahead of schedule. PAGE 6

[illegible] with answers to your thorniest management questions. PAGE 44

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JULY 25, 2005 • VOL. 39 • NO. 30 • $5/COPY

DOUGLAS MULLER

BUGGY Software

IS COSTING THE ECONOMY BILLIONS OF DOLLARS. But some companies are trying a new approach, called application life-cycle management, to exterminate bugs throughout the development process, not just at the end. **SEE 'UP FROM A LOW-QUALITY QUAGMIRE,' PAGE 23**

U.S. IT Wages Inch Up In Tight Labor Market

BY THOMAS HOFFMAN

A strengthening U.S. economy that's fueling increased IT spending and creating a tighter labor market has led to moderate pay gains for technical workers such as application developers and database administrators, according to new research and interviews with IT executives last week.

"There is a noticeable wage increase" for technical skills, said David Myers, director of project management at Solo Cup Co. in Highland Park, Ill.

Myers said he believes that the pay gains are the result of a general rise in IT capital spending, which has resulted in more projects being launched and a decreasing supply of available domestic IT labor. In addition, Myers cited rising labor costs at offshore IT firms as a factor.

Other IT executives said they also have noticed a rise in labor costs within the U.S,

IT Wages, page 56

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HEWLETT-PACKARD

HP Plans Cuts; User Group Shuts Doors

Hurd holds off on strategy questions

BY PATRICK THIBODEAU AND MATT HAMBLEN

Mark Hurd, Hewlett-Packard Co.'s new CEO, last week broke the relative silence about his plans for the company, announcing a 10% workforce cut and the merging of HP's sales force into its major business units. Left unanswered, though, were questions about HP's strategic direction.

DHL's [illegible] says HP cuts don't worry him

Hurd and other HP officials said the changes will make the company's operations more focused, increase its internal accountability and do no harm to its research and development efforts. But the lack of details about HP's future technology plans left users such as Rex Dickey, IT director at Columbia Steel Casting

HP Strategy, page 16

Interex, HP World hit by finance woes

BY PATRICK THIBODEAU AND MATT HAMBLEN

The end of the 100,000-member Interex user group and the HP World conference it was due to hold in August arrived suddenly last week. But the organization's financial collapse was months in the making.

Most Interex members, who now find themselves without an educational, advocacy and support outlet, had no inkling of the problems facing the 31-year-old user group following Hewlett-Packard Co.'s decision to launch its own conference this year.

For example, Rita Work-

Interex, page 14

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Microsoft
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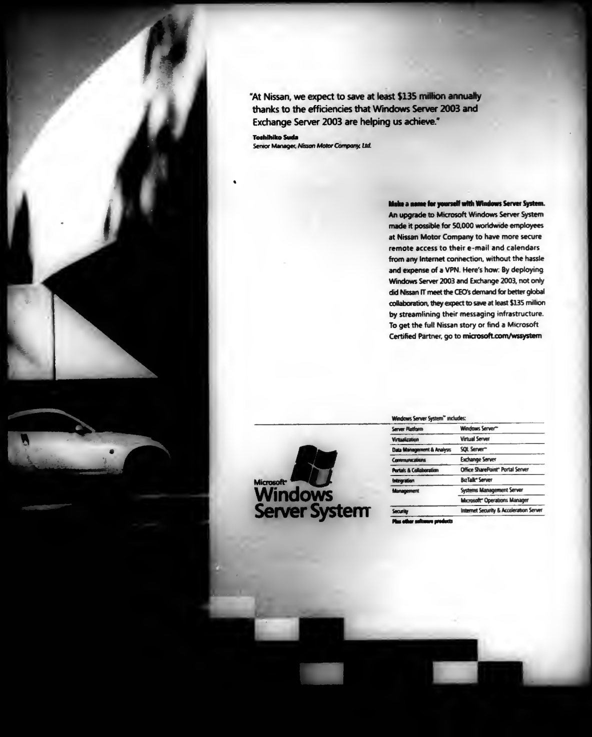
Mr. 50,000 Global Remote and Mobile Users Connected Without a VPN.
NISSAN



"At Nissan, we expect to save at least $135 million annually thanks to the efficiencies that Windows Server 2003 and Exchange Server 2003 are helping us achieve."

Toshihiko Suda
Senior Manager, *Nissan Motor Company, Ltd.*

Make a name for yourself with Windows Server System. An upgrade to Microsoft Windows Server System made it possible for 50,000 worldwide employees at Nissan Motor Company to have more secure remote access to their e-mail and calendars from any Internet connection, without the hassle and expense of a VPN. Here's how: By deploying Windows Server 2003 and Exchange 2003, not only did Nissan IT meet the CEO's demand for better global collaboration, they expect to save at least $135 million by streamlining their messaging infrastructure. To get the full Nissan story or find a Microsoft Certified Partner, go to **microsoft.com/wssystem**

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Health Services

In the Technology section: Health care organizations are using Web services to move information between systems and, ultimately, improve patient care, say IT professionals like Furrukh Khan (left) of the Ohio State Medical Center. **Page 26**

The 100-Year Archive Dilemma

In the Management section: As more organizations store more data longer, a key issue for storage specialists, such as Adam Jansen of the state of Washington, is how to retrieve that data in 10, 20 or 100 years, when data formats, software and hardware will be different. The IT industry says it's working on the problem. **Page 39**

NEWS

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7 **Several Web services** projects have been initiated to enable business-to-business transactions.

7 **Sprint launches** an assessment service to gauge companies' mobile technology needs and strategies.

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10 **Visa, American Express** cut ties with the data processing firm that exposed as many as 40 million account numbers this past spring.

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TECHNOLOGY

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46 **Career Watch:** We look at the hiring prospects for temporary IT workers. Plus, a new study reveals a bright outlook for hiring in the third quarter.

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From the Front Lines of An Outsourcing Deal

IT MANAGEMENT: Gerardo Estrada made the transition from Procter & Gamble to Hewlett-Packard, and then he moved from Mexico to Costa Rica. Based on those experiences, he's got some advice for IT managers overseeing similar transitions. **QuickLink [illegible]**

Options for Modernizing Legacy Systems

DEVELOPMENT: Joseph Gentry of Software AG explains the benefits of preserving and extending applications instead of ripping and replacing them, and he details four ways to do so. **QuickLink [illegible]**

Priceline Turns to Utility Storage

STORAGE: Priceline.com CIO Ron Rose credits his flexible storage environment for multiple benefits, including high availability, in this interview with Storage Networking World Online. **QuickLink [illegible]**

Secrets of Superspies

WEBCAST: In this video presentation, security expert and author Ira Winkler describes actual acts of espionage, including those that he committed, to demonstrate the most cost-effective security programs for large organizations. **QuickLink [illegible]**

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AT DEADLINE

Microsoft Buys E-mail Managed Services Firm . . .

Microsoft Corp. has agreed to acquire FrontBridge Technologies Inc. in an effort to bolster its managed services and messaging security business. FrontBridge provides managed services for e-mail security, compliance and availability. The 160-employee firm will become part of Microsoft's Exchange Server group when the deal closes, likely in September. Terms weren't disclosed.

. . . And Is Fueled by Server, Tool Sales

In other Microsoft news, the company posted solid growth for its fiscal 2005 fourth quarter, highlighted by sales of server software and development tools.

[illegible] NUMBERS

[illegible]	[illegible]	PROFIT
Q4 [illegible]	[illegible]10.16B	$3.7B
Q4 [illegible]	[illegible]9.29B	$2.69B

SAP Profit, Revenue Rise on ERP Sales

SAP AG reported a rise in net income and revenue for the second quarter, driven by increased sales of its ERP software in Asia and the Americas.

[illegible]

[illegible]	[illegible]	PROFIT
[illegible]	[illegible]2.44B	$350M
[illegible]	[illegible]2.16B	$302M

Short Takes

CHOICEPOINT INC. took a $6 million second-quarter charge to cover costs related to the theft of the personal information of 145,000 consumers earlier this year. . . . MICROSOFT announced that it has chosen an official name for its upcoming operating system, code-named Longhorn. The new name is Vista. . . . BUSINESS OBJECTS SA has agreed to buy performance management software maker SRC SOFTWARE INC. for $100 million in cash.

Symmetrix 7 May Get Early Launch

EMC arrays to offer up to half a petabyte of storage

BY LUCAS MEARIAN

EMC CORP today will unveil two new versions of its high-end Symmetrix array that will more than triple storage capacity, quadruple cache and double internal and external throughput of its previous offerings, sources said.

The arrays, however, aren't expected to offer virtualization capabilities or the ability to combine management of Symmetrix and midrange Clariion systems, a feature users are clamoring for.

The seventh generation of Symmetrix, or Symm 7, is nonetheless expected to raise the bar in the storage industry by offering up to half a petabyte of storage and mirrored cache for up to 1TB of memory.

The Symm 7 announcement comes months ahead of the expected introduction of the arrays this fall.

EMC last week was coy about its plans, but said it would make "one of its most important announcements for 2005" today.

During an earnings call last Thursday, Joe Tucci, CEO of the Hopkinton, Mass.-based vendor, said, "My marketing team has definitely instructed me to not tell you [today's event] will be for the launch of Symm 7."

In a report last week, Shebly Seyrafi, an analyst at Merrill Lynch & Co., said the new DMX 3500 and 4500 arrays are expected to sport 4Gbit/sec. Fibre Channel ports on the front end and internal throughput speeds of 160GB/sec. In comparison, the DMX 3000 has throughput of 64GB/sec.

According to the report, the DMX 3500 will hold up 1,440 disk drives for 432TB of storage capacity, and the DMX 4500 will have up to 1,920 drives for 576TB of capacity. In comparison, the DMX 3000 has a capacity of 172TB.

John Halamka, CIO at CareGroup Healthcare System in Boston, said he expects EMC to develop closer links between its Symmetrix and Clariion products over the long term.

> **"I expect everything to be faster, bigger and cheaper as time goes on.**
>
> **LEV KATZ**, DATA CENTER MANAGER, MIDAMERICA BANK FSB

Halamka said he believes that a system for combined management of Symm 7 and Clariion hardware will be based on future upgrades to both the storage software management platforms and firmware-based replication.

It isn't surprising to Halamka that Symm 7 doesn't include these features. "We never expected firmware replication between Clariion and Symm at this time," he said. "We would expect improvements in storage management tools to evolve under a new applications framework" that would link Symmetrix, Clariion and third-party arrays.

Halamka said his IT team members "favor the look and feel of Clariion's Navisphere management tools versus Symmetrix's Control Center."

Lev Katz, data center operations manager at MidAmerica Bank FSB in Naperville, Ill., said he's looking for more Navisphere-like functionality in Control Center than is expected today.

Katz, who uses both Symmetrix and Clariion arrays, said more hard-drive space doesn't impress him because "I expect everything to be faster, bigger and cheaper as time goes on."

However, he said the mirrored cache does impress him, "because that's a technology breakthrough" for EMC. Katz wants EMC, first and foremost, to improve the granularity of the management features on the Symmetrix.

Seyrafi said that although EMC has been emphasizing its midrange Clariion line and software, the high-end Symmetrix array and related software and services still represent EMC's "largest revenue component," accounting for 40% of revenue. **55736**

IBM Services Head Leaves Amid Reorg

Several personnel moves announced

BY STACY COWLEY

IBM last week said it is reorganizing its Global Services business and has chosen a pair of executives to replace the group's leader, John Joyce.

Joyce, a 30-year veteran of IBM who once served as its chief financial officer, is joining Silver Lake Partners, a private technology investment firm.

Taking charge of IBM Global Services will be Ginni Rometty, senior vice president of enterprise business services, and Mike Daniels, senior vice president of IT services. The two will report to IBM CEO Sam Palmisano.

Charles King, an analyst at Pund-IT Research in Hayward, Calif., said the dual management structure makes sense for the Global Services business, which he called a "behemoth within a behemoth."

"I think the idea of dividing it into disparate organizations makes a good deal of sense," he said.

An IBM spokesman said the moves were not made in response to problems in the services business. Although the unit fell short of expectations in the first quarter, it appears to have righted itself since. Global Services boosted its contracted backlog by $3 billion year over year in the second quarter.

The spokesman said the realigned services group will focus more heavily on "high value" skills, like those in the Business Consulting Services (BCS) group IBM formed around its acquired PricewaterhouseCoopers Consulting practice. Rometty previously ran BCS.

Daniels, who joins Rometty at the helm of Global Services, previously ran sales for IBM Americas. He will be replaced in that role by Marc Lautenbach, who was general manager of IBM's small- and midsize-business efforts.

IBM's new structure also spotlights executive Bob Moffat, who was named senior vice president of integrated operations.

At the same time, IBM said that Janet Perna, general manager of the information management unit, plans to retire after more than two decades with the company. Her job will go to Ambuj Goyal, general manager of IBM's Workplace, Portal and collaboration software division.

In another executive move, IBM promoted Nicholas Donofrio to executive vice president of technology and innovation. He will oversee a number of areas, including IBM's famed research group.

Keeping IBM Global Services running smoothly is a priority for the company, which has reshaped itself in the past decade around the services business. Prudential Equity Group LLC analyst Steve Fortuna praised Global Services as a gem that's underappreciated by Wall Street. **55739**

Cowley writes for the IDG News Service.

Web Services Mature, See More B2B Transaction Use

Companies launch projects to link to business partners

BY HEATHER HAVENSTEIN

Buoyed by improved technology and maturing standards, many IT operations are ramping up efforts to extend the use of Web services from application integration projects to ones involving business-to-business transactions.

For example, Starwood Hotels & Resorts Worldwide Inc., this month purchased Web services management tools in preparation for a major development project that's due to begin this fall.

Starwood plans to move its loyalty business application and its core IT system — a reservation and booking engine — off its mainframe, said Tom Cooopby, chief technology officer at the White Plains, N.Y.-based company.

The project is part of a 4-year-old effort to migrate from mainframe-based systems to distributed hardware running Linux and Unix. The new IT platform will include a services layer to expose business logic to Starwood's call centers and its partners in the sales channel and other areas.

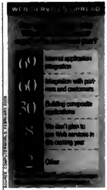
By March 2006, Starwood plans to begin moving its 700 hotels to the new reservation system while boosting the number of Web services it has in production from 60 to 150.

Conophy said Starwood will use a Web services broker and a centralized control console tool from Actional Corp. in Mountain View, Calif., to replace homegrown tools cobbled together two years ago.

"We wanted better automation to track performance of services, the latency of services and to tell us if something is outside of the norm so we could take action on it," Conophy said.

Savings Anticipated

Migrating the reservations application off the mainframe will cost between $10 million and $60 million, Conophy said. In the end, however, he expects the entire mainframe migration to net $10 million to $20 million in annual savings.



SOURCE: COMPUTERWORLD, FEBRUARY 2005

Stratus Technologies Inc., a maker of fault-tolerant servers, last month went into production with a Web services business-to-business system that replaced its proprietary system for managing invoicing, order confirmation and shipment document exchanges with its contract manufacturers.

Maynard, Mass.-based Stratus used an enterprise service bus (ESB) from Waltham, Mass.-based Cape Clear Software Inc. to replace a messaging system that directly exchanged data between its own ERP system and those of its manufacturers.

Cecelia LeBlanc, IS manager at Stratus, said the company expects the ESB to lower maintenance costs by 70% and boost productivity by 20%.

Escaping the Enterprise

Vendors, meanwhile, have been enhancing their tools to support Web services outside the enterprise.

Earlier this month, SOA Software Inc. in Santa Monica, Calif., announced a new version of its XML VPN Web services tool set that added support for digitally signing messages. And Oracle Corp. unveiled an integrated business process platform designed to help companies secure and manage internal or external Web services.

Ron Schmelzer, an analyst at ZapThink LLC in Waltham, Mass., said the use of Web services for external transactions is reaching a tipping point, as vendors beef up their products to address critical challenges such as services orchestration and security based on maturing standards.

Thomson Learning, a professional and academic testing company in Stamford, Conn., has finished a project undertaken with its business partners to develop a system that uses Web services to schedule tests and transmit scores.

This month, the company will begin working on a system to manage the identity verification process in its business-to-business transactions. The goal is to make it possible for its partners to easily pass through various Web services as a back-end security token server automatically verifies end-user identities, said Christopher Crowhurst, Thomson vice president and principal architect. 55733

Sprint Offers to Gauge Mobile Needs, Strategies With Assessment Service

Early user looks to lower costs, boost IT's control

BY MATT HAMBLEN

Sprint Corp. today will launch a service through which it will assess companies' mobile technology needs and offer them advice on managing handhelds, cell phones, supporting software and their wireless service plans.

Sprint will price its Mobile Business Assessment (MBA) service at $50,000 to $70,000 for engagements that last four to eight weeks, making the commitment far less expensive than full-fledged professional services contracts are, said Scott Boehmer, general manager of the vendor's Mobile Business Solutions unit.

Sprint will be agnostic about wireless products and services, Boehmer said, promising that MBA isn't designed to push its own offerings. The vendor will send teams of consultants into companies to interview employees and analyze mobile installations and corporate policies. It will then produce reports and provide advice on developing long-term mobile strategies and lowering costs.

Sprint recently finished a pair of assessments for Carlson Companies Inc. at a combined cost of less than $100,000, said Brian Vik, director of telephony solutions at the Minneapolis-based hospitality and travel company. The assessments involved interviews with 92 employees in 15 business units, plus a review of mobility policies and monthly expense records.

Vik said Sprint found that Carlson was spending more than $4 million annually on mobile technology and services. It made recommendations that could drive those costs down by 35% and help Carlson make better use of mobile technology, he added.

"We found in the assessments that we were very unorganized with our wireless approach, whether it be using cell phones or BlackBerries," Vik said. He noted that Carlson's current approach is based on the personal preferences of end users instead of a corporate plan. "We need policies," he said.

> **"We found . . . that we were very unorganized with our wireless approach, whether it be using cell phones or BlackBerries.**
>
> **BRIAN VIK**, DIRECTOR, TELEPHONY SOLUTIONS, CARLSON COMPANIES

Carlson hopes to implement Sprint's recommendations over the next six to 18 months. One decision already made following the assessments was to name an executive sponsor of the mobility program. Carlson chose its vice president of human resources to handle the chore of "sending a tough message" that all mobile devices used by workers need to be bought and controlled by the company, Vik said.

Only about half of the 3,500 or so devices now used by Carlson's workers are owned by the company. Going forward, if an employee's job requires a device such as a smart phone or a BlackBerry, "we will pay [the cost] because the function requires it," Vik said.

Sprint's program is unique among network carriers, said Gene Signorini, an analyst at The Yankee Group in Boston. Signorini said Sprint "has to come into a company with a technology-agnostic approach or they won't have credibility." But, he added, users shouldn't forget that MBA "opens up the opportunity for Sprint to sell other services." 55741

BRIEFS

Intel Unveils Pair of Itanium 2 Chips

Intel Corp. has taken the wraps off two new Itanium 2 processors that should tide the company over until the expected launch of its first dual-core Itanium processor later this year. Intel said that it added two 1.66-GHz Itanium 2 processors that are notable because they each have a 667-MHz front-side bus, which provides a faster link between the CPU and the system's main memory.

IBM's Results Return to Form

IBM returned to financial form in the second quarter, reporting income growth and solid revenue after scaring financial analysts by falling short of expectations in its first quarter.

[illegible]	[illegible]	[illegible]
[illegible]	$22.3B	$1.83B
[illegible]	$23.1B	$1.74B

i2 Stock Is Back on Nasdaq Exchange

After a two-year hiatus, shares of i2 Technologies Inc. stock can be traded on the Nasdaq Stock Market. The Dallas-based vendor said that the Nasdaq Listing Qualifications Panel agreed to let i2 common stock return to the exchange late last week. New York-based Nasdaq began delisting efforts against i2 in late March 2003. Since May 2003, i2 stock has traded on the National Quotation Service Bureau.

Lucent Profit Down, But Sales Up 7%

Lucent Technologies Inc. reported a decline in profit for its third fiscal quarter, although strong sales of third-generation mobile network gear helped boost revenue.

[illegible]	[illegible]	[illegible]
[illegible]	$2.34B	[illegible]
[illegible]	$2.19B	$387M

ON THE MARK

HOT TECHNOLOGY TRENDS, NEW PRODUCT NEWS AND INDUSTRY BUZZ BY MARK HALL

MATTHEW FAULKNER

Don't Fall Over The Security Cliff . . .

. . . on your network edge. With PDAs, smart phones, USB fobs, laptops and other portable devices attaching to and detaching from your network at will, you need to heed warnings that crucial corporate data might slip by your firewalls, intrusion-detection systems and user authentication processes. "IT managers have been totally blindfolded with regard to the security of endpoints," argues Gil Sever, CEO of Safend Ltd. in Tel Aviv. In early September, the company hopes to remedy part of the problem with its new Safend Protector software. The tool includes client-side code for Windows-based systems that enforces device access policies at the corporate, departmental or individual level. For example, you can restrict a laptop's ability to print to different printers based on its location or serial number. Or you can allow end users to read from USB thumb drives but not write to them. When you install Protector or change access policies, you need not reboot your PCs, Sever says. Pricing will start at $32 per seat, and volume discounts are available.

While many of you manage mobile workers whose pockets are stuffed with all manner of messaging and Web-ready gadgets, some of you oh-so-lucky ones get to support countless consumers accessing your systems with an even wider array of digital devices. How do you know the person who just downloaded her stock portfolio to a Palm device is who she says she is? A static ID and password, perhaps? Stu Vaeth, chief security officer at Diversinet Corp. in Toronto, thinks that isn't enough. His company's MobiSecure software lets you dynamically provision passwords to mobile devices via soft tokens. The tiny app runs on BlackBerry, Java, Palm, Symbian and Windows CE handhelds and is accessed via a PIN. It calls a back-end security application to verify the device so the user can then sign in. VeriSign Inc. liked MobiSecure enough to plan field trials for later this summer with the intentioo of rolling out the software in the fall as part of its United Authentication technology. Diversinet also hopes to sell MobiSecure through other vendors, Vaeth says.

The treacherous network edge is made even scarier by malicious or incompetent end users who can easily access and distribute confidential information. According to Steve Roop, vice president of marketing at Vontu Inc. in San Francisco, 68 security breaches had been made public this year through mid-July, prompted partly by California's data breach disclosure law. Of the 64 incidents in which the source of the data leak has been identified, 49% were caused by insiders, Roop says. He claims the Vontu 5.0 security software suite, which is due to ship by the end of September, can vastly reduce your chances of getting burned by your end users. A new module called Vontu Discover crawls through your network looking for more than 200 file types that may contain private data. Roop says the software can take a "fingerprint" of information you want to secure — customer data, source code, chemical formulas — and look for exact matches on storage devices throughout a global network. Vontu's tools then block the unauthorized sending of such data via e-mail, FTP or other means. Pricing for the suite will start at $100,000.

Terminal-emulation market is not . . .

. . . in terminal condition. So says Zvi Alon, CEO of NetManage Inc. in Cupertino, Calif. Alon continues to pocket cash by selling 3270, 5250 and other hoary terminal-emulation programs. "Companies are buying them in the tens of thousands all the time," he says. That's because when companies upgrade their desktop machines, they generally need new software, including terminal emulators. The so-called webification of Cobol-laden mainframe applications hasn't hurt his business a bit, Alon says, claiming that barely 5% of mainframe apps can be accessed by a browser. NetManage does have tools to help IT migrate mainframe programs for browser access. But a bigger market, Alon suggests, is integrating corporate apps into overall business processes. To that end, he hints that by year's end, NetManage will deliver an application-development framework that lets programmers use scripts to link mainframe and non-mainframe apps in business or service processes.

Word users get on the XML content . . .

. . . management road with a free patch from Astoria Software Inc. in San Mateo, Calif. An update to Astoria XML Content Management Platform 4.4 lets Word users check documents in and out of the vendor's content repository and follow the workflows of documents. According to Joe Eschbach, Astoria's vice president of marketing, end users won't have to learn new content-authoring tools such as XML-ready FrameMaker or Epic. The patch ships by July 29. ● 58805

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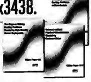

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BRIEFS

EDS Wins $170M Medicaid Pact

The state of Kentucky awarded Electronic Data Systems Corp. a contract valued at up to $170 million to implement a management information system for Medicaid. The agreement also calls for EDS to update and operate the state's legacy Medicaid system. The new system will be based on EDS's interChange Health System, which is also running in Oklahoma, Kansas and Pennsylvania.

Strong PC Demand Fuels Intel Results

Intel Corp. credited stronger-than-expected PC demand for a solid increase in second-quarter revenue and net income.

INTEL BY THE NUMBERS

	REVENUE	PROFIT
Q2 05	$9.2B	$2B
Q2 04	$8B	$1.8B

IBM Buys Electronic Forms Company

IBM has agreed to buy PureEdge Solutions Inc. for an undisclosed sum. IBM plans to integrate PureEdge's electronic forms technology into its Workplace and Lotus collaboration products. Victoria, British Columbia-based PureEdge, an IBM business partner, builds XML-based software that can customize business applications as well as capture and display data in other applications.

Microsoft Sues Google Over Hiring

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IT Managers Criticize Federal Data-Loss Bill

Contend lost encrypted data need not be reported, act would incur expenses

BY LUCAS MEARIAN

THE PROGRESS of a U.S. Senate bill that would require companies to disclose any compromise of sensitive data was slowed last week to allow for more input from senators.

Several IT managers interviewed last week criticized the proposed bill because it calls on companies to disclose the loss of data regardless of whether it's encrypted — and because it calls for fines of up to $11 million for failing to report losses. The managers contend that encrypted data is unlikely to be translated if stolen or lost.

The federal proposal comes after several firms reported the loss of personal data in recent months through the theft or loss of tapes and through Internet breaches.

Consideration Postponed

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"You're micromanaging, and you're going to add some dollar amount to someone's business that has no effect on the general population," said Bo Coughlin, vice president of the commercial services division at Time Warner Cable Inc. Time Warner last spring reported the loss of backup tapes that contained the personal information of about 600,000 current and former employees [QuickLink 54151].

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Charlie Fulks, CEO of Credit Union Data Processing Inc. in Farmington, Utah, whose firm started encrypting data this year, also opposes a requirement that the loss of encrypted data be reported.

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Daniel Chow, an IT systems and security engineer at Boeing Employees' Credit Union in Tukwila, Wash., said he "strongly" agrees with the bill in terms of it "lighting a fire underneath some firms' butts to start protecting their data." **Q 55734**

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In separate announcements last week, Visa and Amex said they are ending their relationships with CardSystems Solutions Inc. in Atlanta because the company didn't meet its contractual requirements in providing credit card processing services for merchants.

After Oct. 31, Visa and Amex will no longer allow CardSystems to process their transactions. Meanwhile, rival MasterCard International Inc. said it will continue to work with CardSystems if it develops a detailed plan by Aug. 31 to adequately improve security procedures.

MasterCard last month disclosed that CardSystems' systems were breached. Credit cards issued by all three companies were affected by the breach [QuickLink 55146].

Rosetta Jones, a spokeswoman for San Francisco-based Visa, said in a statement that her firm's action comes "after an internal and forensics review of its processing practices demonstrated that – in violation of Visa's rules – [CardSystems] did not have the appropriate controls in place to protect cardholder information."

Though the statement acknowledged that CardSystems has worked to fix problems that led to the breach, it also said, "CardSystems has not corrected, and cannot at this point correct, the failure to provide proper data security for Visa accounts."

According to Jones, CardSystems kept cardholder data on file after transactions were processed, which is in violation of its agreement with Visa.

Judy Tenzer, a spokeswoman for New York-based Amex, wouldn't comment on the direct cause of that firm's termination of the contract with CardSystems. A spokesman for CardSystems didn't respond to numerous requests for comment.

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In a statement last week, MasterCard said it will continue to work with CardSystems, at least in the short term, because the company has worked to improve its security and procedures since the spring.

"However, if CardSystems cannot demonstrate that they are in compliance by [Aug. 31], their ability to provide services to MasterCard members will be at risk," the statement said. Merchants will be able to choose another processing company to provide the services once CardSystems' agreements with Visa and Amex have ended, Tenzer said.

– Todd R. Weiss

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– Todd R. Weiss

GLOBAL

An International IT News Digest

African Countries Try to Boost BPO Investments

ACCRA, GHANA

FOLLOWING A ROUTE that was blazed by India and the Philippines, countries throughout Africa are trying to become competitive destinations for business process outsourcing (BPO) by promoting low-cost labor, offering tax breaks and building up their IT infrastructures.

KenCall EPZ Ltd. recently opened in Nairobi as Kenya's first international call center, for instance. Mauritius is building a second "cyber tower" office building in the city of Ebene to host BPO vendors. And Botswana is making a big push for BPO investments with a favorable corporate tax rate of 15% that's guaranteed until June 2020.

South Africa leads Africa's BPO sector with call centers and all types of back-office operations, said Peter Ryan, an analyst at London-based Datamonitor PLC. In South Africa, call center agents are paid an average of 30% less than they are in the U.K., speak English as a first language and can handle complex, unscripted calls, said Luke Mills, executive director of CallingtheCape, a oonprofit agency that promotes the call center outsourcing industry in Cape Town.

■ JOHN YARNEY, IDG NEWS SERVICE

GLOBAL FACT

[illegible]

Aussie Broadcaster Builds Digital Archive

SYDNEY

AUSTRALIAN BROADCASTING Corp. (ABC) this month will begin digitizing its entire film and radio archive, in a $15 million (Australiao) project that may set a national record for digital storage capacity.

The archive will grow to 1.5 petabytes in three to five years, without counting new content, said Fred Spark, manager of systems management services at the Sydney-based broadcaster. ABC has set up a workshop where three shifts of seven people will do the labor-intensive conversion work, he said.

Over the past nine months, the company has installed IBM servers, storage arrays and tape libraries to support the digital archive.

Tape is the best option for an archive of the size planned by ABC, Spark said. He added that the data will be readily accessible for producers to retrieve footage and audio reports "in minutes rather than hours or days."

■ RODNEY GEDDA,
COMPUTERWORLD AUSTRALIA

North and South Korea Connect Telecom Cables

TOKYO

FIBER-OPTIC CABLES in North Korea and South Korea were interconnected last week, marking the first time that telecommunications oetworks between the two countries have been joined.

The cables, which belong to KT Corp. in the south and state-run Korea Post and Telecommunications Corp. in the north, will be used to provide communications and Internet services between the two nations, said KT spokeswoman Suzie Nam.

The linkage is expected to be especially important for a new industrial zone in the city of Kaesong, which lies a few kilometers north of the border and is intended to be used by South Korean manufacturers. 55884

■ MARTYN WILLIAMS, IDG NEWS SERVICE

Compiled by Mitch Betts.

Briefly Noted

The European Commission this month issued a directive requiring all 25 European Union member countries to make available the 5-GHz frequency band for wireless services, starting Nov. 1. The move enables Wi-Fi service providers to offer faster transmission rates and avoid capacity shortages on the 2.4-GHz band they now use.

■ SIMON TAYLOR, IDG NEWS SERVICE

Lombard Canada Ltd., a Toronto-based insurance company, has moved its core applications off mainframes and onto distributed servers running Windows Server 2003 and SQL Server, according to an announcement made last week by two software vendors involved in the migration. The vendors are Cybermation Inc. in Markham, Ontario, and Micro Focus International Ltd. in Newbury, England.

Similarity Systems Ltd., a vendor of data quality management software in Dublin, last week said it has acquired Austin-based Evoke Software Corp., which makes data-profiling software. Similarity said it will merge the two companies' technologies. Financial terms weren't disclosed.

Levitt: Push for Sarb-Ox Reforms Is 'Shortsighted'

BY THOMAS HOFFMAN

When Congress moved to craft the Sarbanes-Oxley Act of 2002, legislators assembled the bill "in record time," said Arthur Levitt, former chairman of the U.S. Securities and Exchange Commission. However, he said, the authors did little to work with company executives to determine the demands the law would place on businesses.

Still, business leaders who are pushing hard for major reforms to ease Sarbanes-Oxley prerequisites because of the high costs of compliance "are being shortsighted," said Levitt. The mandates for public companies to document financial controls "have been well worth the costs" for investors, he said.

"If you have any doubts, ask those thoughtful shareholders for any of those 586 companies that reported material weaknesses [with their internal controls] during the first four months of the year," said Levitt, now a senior adviser at The Carlyle Group in Washington.

Levitt was a panelist at a regulatory compliance conference in Washington last week that was sponsored by BindView Development Corp., a Houston-based security software provider.

Unlike the authors of Sarbanes-Oxley, the writers of the Health Insurance Portability and Accountability Act actively sought involvement from health care industry professionals in order to make the requirements scalable and practical, said John Parmigiani, co-author of the HIPAA security provisions. He is president of John C. Parmigiani and Associates LLC, an Ellicott City, Md.-based consulting firm.

"You need to get a lot of involvement from industry when crafting regulations, and you need to set realistic time frames," said Parmigiani. "If you're a two-person [medical] clinic, you can't take [the same approach to HIPAA compliance] as the Mayo Clinic."

The lack of such cooperation is one reason why certain Sarbanes-Oxley requirements can be open to interpretation, some IT executives said.

"If we were told passwords had to expire at least twice per year, we could easily meet the requirement," said Joseph Puglisi, CIO at Emcor Group Inc., a mechanical and electrical systems contractor in Norwalk, Conn. "But we and the auditors have to negotiate on what we think is acceptable."

When many large public companies had to document and test their internal controls for the first time under Section 404 of Sarbanes-Oxley last year, the exercise was a real bear for IT departments, said Everett C. Johnson, international president of the Information Systems Audit and Control Association. Since most IT departments never audited IT controls in the past, "the process turned into an Ironman event," he said. However, Johnson added, the audit requirements "helped lead to better compliance."

Dave A. Richards, president of The Institute nf Internal Auditors in Altamonte Springs, Fla., said that for the hundreds of companies that met Section 404 requirements for the first time in January, 20% of their time on compliance efforts was spent documenting their controls. Between 15% to 20% of that work was devoted to remediating that documentation.

Levitt said he believes incoming SEC Commissioner Christopher Cox will work with legislators to modify requirements imposed under Sarbanes-Oxley, such as making it less expensive for smaller businesses to comply with Section 404. 55710

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Continued from page 1

Interex

man, a Unix administrator at the West Virginia Bureau of Employment Programs in Charleston, said she was stunned by the cancellation of HP World 2005. Workman was scheduled to give a presentation about her agency's disaster recovery plan at the conference. HP World "was actually the one conference I did enjoy," she said. "It was basically geared to the users — not controlled by the vendor."

"Wow, what a waste," said Paul Gerke, a systems administrator for Clark County in Vancouver, Wash., referring to the demise of Interex.

Gerke said HP World was a good source of unfiltered information about HP products. In comparison, the presentations at a storage conference that was run by HP in May "were all very 'HP, rah-rah,' " he said. For that reason, Gerke had decided not to attend HP Technology Forum 2005, the new conference the vendor is holding in September.

Interex closed without explanation. Calls to its office weren't returned, and a statement posted on its Web site last Monday said only that the group's leaders "have found it financially necessary to close the doors." Interex is expected to file for bankruptcy protection, sources said.

A Big Choice

The shutdown came almost exactly one year after HP said it planned to run its own conference [QuickLink 48350]. Interex and the three other independent HP user groups faced a big choice: Join HP as co-sponsors or continue to hold separate events.

Interex decided last August to go forward with HP World, which was a major source of revenue for the Sunnyvale, Calif.-based user group.

But some people were worried. In late March, Kees den-Hartigh, HP World program co-chairman and a systems network analyst supervisor at the University of Alberta in Edmonton, wrote to new HP CEO Mark Hurd to express his concerns about the competitive threat posed by HP's conference and the appearance that HP was "working hard to put Interex out of business."

In his letter, which he provided to *Computerworld* last week, denHartigh said he had heard reports that some vendors weren't going to lease trade show floor space at HP World because they would have booths at the HP Technology Forum instead.

> **"It is with great sadness, that after 31 years, we have found it financially necessary to close the doors at Interex. . . . We dearly wish that we could have continued supporting your needs but it was unavoidable.**
>
> **FROM A STATEMENT TO INTEREX MEMBERS** POSTED ON THE USER GROUP'S WEB SITE

Hurd didn't respond, den-Hartigh said, although a similar letter he sent in February did get a response from HP that said his view of its intentions was inaccurate.

Conference Cutbacks

HP remained a premier sponsor of this year's HP World, at a cost of about $100,000, according to Interex members and conference organizers, who asked that their names not be used. But it drastically cut back on its trade show presence, the sources said. HP leased 7,000 square feet of floor space at HP World 2004 but was taking only 900 square feet this year, they said.

HP also told Interex that it intended to cut back on the number of technical sessions it supported at HP World.

In the past, HP workers typically handled about half of the conference's 400 sessions. But HP initially said it would do only 20 sessions this year, according to the sources. It later raised that figure, but only to 38, they said.

David Parsons, HP's vice president of enterprise marketing for the Americas region, confirmed the details about this year's plans. But Parsons said there were good reasons for the changes.

About 700 HP employees attended HP World 2004, and the company used the conference for technical training of its workers as well as users and business partners. This year, HP wanted to provide the training at its own event.

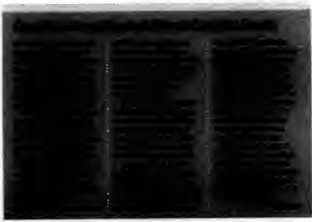
HP didn't intend to hurt Interex, Parsons said. He added that the company laid out its HP World support plans last year and that the user group "made a business decision" to pursue its own course.

The Encompass, ITUG and OpenView Forum International user groups said they remain on solid financial footings. Both the OVFI and ITUG said they plan to continue holding their own conferences while working with HP on its event (see story at left).

Garry Smith, director of information systems at manufacturer Charles McMurray Co. in Fresno, Calif., is a former president of an Interex chapter in central California that had 120 members until it stopped meeting in 2002.

Smith said attendance dropped dramatically as members diversified beyond the now-discontinued HP e3000, the system that prompted the formation of Interex. "It's disappointing to hear of Interex closing, but that's the evolution of things," he said.

On the other hand, John Payne, an HP-UX systems engineer at Brigham Young University in Provo, Utah, said he will miss HP World. "When you get real users showing real stuff, you can't go wrong," Payne said. Q 55740



Future Path for Interex Members Remains Unclear

IT REMAINS UNKNOWN whether Interex will re-form in some fashion or if a new user group will emerge to fill the void left by its demise. As of last week, the only immediate option for would-be HP World attendees was to attend Hewlett-Packard's new conference at no extra cost.

HP said it will offer free passes to the HP Technology Forum to users who had already registered to attend HP World 2005 and had paid either the full conference or trade-show fee. The conference is scheduled to start on Sept. 12 in New Orleans.

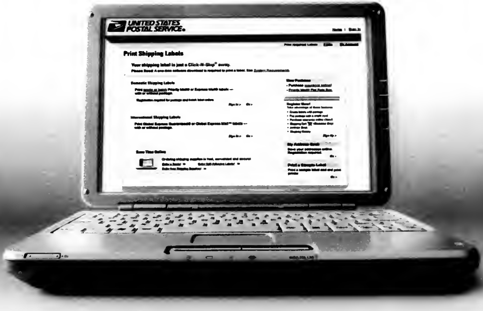
The company is also working to identify technical sessions planned for HP World that would complement or add to the program at its conference, said David Parsons, vice president of enterprise marketing for the Americas region at HP. "We will definitely be increasing the number of sessions based upon the fact that they canceled HP World," he said.

In the long term, one possible avenue would be for Interex members to join Encompass, a Chicago-based user group that traces its roots to the Digital Equipment Computer Users Society. Interex and Encompass co-sponsored HP World 2004, although the latter group switched its allegiance to HP's conference this year.

Kristie Browder, president of Encompass and IT director at Silicon Laboratories Inc. in Austin, said her group plans over time to offer a place for Interex members. "We will reach out to them eventually," Browder said. "We're trying to make sure everything runs its course as far as what's happening at Interex with respect to them."

One potential issue, though, is that Encompass, with 10,000 members, is far smaller than Interex was.

– Patrick Thibodeau, Lucas Mearian and Matt Hamblen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Continued from page 1

HP Strategy

Co. in Portland, Ore., wanting to hear more from Hurd.

Dickey said the CEO needs to tell users what's in store for HP's key product lines. That's a critical issue for Dickey, who in April completed a transition from an HP e3000 system to an HP 9000 running HP-UX. Columbia Steel made the move in response to HP's decision to discontinue the e3000, which the vendor stopped selling in 2003 and is due to drop from support at the end of next year.

"I bet our company's technology direction when I chose to go from the HP 3000 to HP-UX," Dickey said. "It's very important to know — in a reliable manner — where they are going with it."

> **If HP were selling sushi, they'd call it 'cold, dead fish' because they're so bad at marketing.**
>
> **MAUREEN GREER,** ASSISTANT VICE PRESIDENT OF IT COMPLIANCE AMEGY BANK NA

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Charles King, an analyst at Pund-IT Research in Hayward, Calif., said Hurd will have to air his long-term plans in the near future. "This was more a matter of 'We're cutting staff, getting expenses under control and moving forward.' " King said. "But 'Where are you going?' was pretty much unaddressed."

Hurd acknowledged as much during an interview with the IDG News Service. "What you get on a day like today," Hurd said, "is a lot of questions like that: 'What's coming next?' Right now, where we really are is focused on making HP the best HP that we're going to make it."

HP plans to cut 14,500 workers over the next six quarters, with most of the reductions coming in support functions such as IT, human resources and finance. Only minimal cutbacks will be made in sales, it said, and "little change to head count" is planned within R&D. But the company later confirmed that HP Labs is ending four research projects to focus on ones with better chances of paying off financially.

The vendor is also eliminating its Customer Solutions Group, which handled sales to enterprise customers, small and midsize businesses, and government agencies. Sales functions will now be embedded in HP's Technology Solutions, Imaging and Printing and Personal Systems groups.

Room for Improvement

During a conference call, Hurd said the planned job cuts are needed to give HP "a competitive cost structure."

Maureen Greer, assistant vice president of IT compliance at Amegy Bank NA in Houston, agreed that the layoffs are overdue and said that she expects to see business process improvements in HP's back-office operations. Greer also thinks the changes will improve HP's marketing, which she pointed to as a major weak spot. "If HP were selling sushi, they'd call it 'cold, dead fish' because they are so bad at marketing," Greer said.

The Hurd Effect

MARK HURD

- a decision by predecessor Carly Fiorina to combine the company's PC and printer operations
- former PalmOne CEO Todd Bradley to run the PC unit
- 26-year HP veteran Cathy Lyon chief marketing officer
- IT from supply chain operations and brought in former Dell CIO Randy Mott to manage IT
- plans to lay off 14,500 workers and fold sales into HP's three major business units

Dennis Deane, a Prague-based program manager for European IT services at DHL International GmbH, said he has received strong assurances from his HP account representatives that the restructuring won't affect the products used by the delivery company.

"DHL has been told that these cuts are targeting internal, predominantly back-office functions to make the company leaner, rather than specific product lines," Deane said.

Satish Ajmani, CIO for the government of Santa Clara County in California, hasn't been happy with the quality of some of the PCs shipped to his IT operation by HP. He said the increased accountability that Hurd expects to get from the restructuring could be a good thing for users. "We hope to see their product quality improve," Ajmani said. **55737**

Tom Krazit of the IDG News Service contributed to this story.

Exec Says Changes Make HP's Units More Focused, Accountable

BY PATRICK THIBODEAU

Todd Bradley, *who last month was named executive vice president of HP's newly independent Personal Systems Group, told* Computerworld *last week that the company's restructuring plan was designed to improve both the focus and accountability of its three major business units. Excerpts from the interview follow:*

How will this restructuring affect the service and support that enterprise customers get from HP? It shouldn't impact them at all. This is meant to be a beneficial move to our customers because it brings both focus and accountability into the business units and [ultimately] into that sales rep or service person that calls on a customer. We worked very, very hard to take a long look at the organizational structure and change our organization from a go-to-market perspective but really make sure it's relatively seamless to our customers.

Will the restructuring result in any road map changes to HP's enterprise product lines? Not that I'm aware of. While people are really focused on the number of layoffs, [internally] this has been far more focused on how we increase accountability in the businesses.

Is there any special outreach to your large customers to explain this change? That's onguing.

What's the message you're bringing to the customers? Consistency of product; improved execution; improved accountability in the business segments.

This isn't the first employee reduction that HP has made; you've seen some deep cuts in the past. How strong a company will HP be after it completes this restructuring? It's pretty clear with what we talked about that we're focused on our strengths. I think you've seen lots of companies restructure over the last several years. Those companies that restructure yet focus on how the restructuring improves their operating performance, [that] is what we've done here.

How do you think this restructuring differentiates you from your top competitors? I think the biggest thing is the fact that we have created three business units that are very focused on their markets, very focused on rapid execution [and] have far more accountability in place at a lower level than we ever had.

There's been speculation that this month's hiring of former Dell CIO Randy Mott to run HP's IT operations is an indication of a shift toward Intel platforms and away from Unix in terms of products. Is there anything to be read into that? No. Randy Mott is here because he's one of the best CIOs in the country. The challenges we have — not the least of which is our internal IT cost — is what he's focused on.

One of HP's legacies is its culture of innovation. But there's an argument that if employees are always worried about restructuring and getting laid off, it's going to be very hard for them to perform at their best. What are you doing for the employees who remain? It's a big adjustment. But people are excited about the fact that we have more accountability, that we'll have a stronger marketing message, more tailored to the products themselves. It's always a disappointing challenge when you have to make layoff reductions. But the HP Way is about innovation, it's about execution, and it's about how we go to market with the best products that we can. And none of that has changed. **55696**

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Continued from page 1

HP Strategy

Co. in Portland, Ore., wanting to hear more from Hurd.

Dickey said the CEO needs to tell users what's in store for HP's key product lines. That's a critical issue for Dickey, who in April completed a transition from an HP e3000 system to an HP 9000 running HP-UX. Columbia Steel made the move in response to HP's decision to discontinue the e3000, which the vendor stopped selling in 2003 and is due to drop from support at the end of next year.

"I bet our company's technology direction when I chose to go from the HP 3000 to HP-UX," Dickey said. "It's very important to know — in a reliable manner — where they are going with it."

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Microsoft Exec Outlines Plan to Sell Service SKUs

BY CAROL SLIWA
MINNEAPOLIS

During a keynote address at Microsoft Corp.'s recent Worldwide Partner Conference here, CEO Steve Ballmer said the company will offer managed services that are designed "more like a product or a standard offer and less like a set of customized outsourcing services." **Rick Devenuti**, *senior vice president of Microsoft Services & IT, discussed with* Computerworld *the company's plans to sell services under a model where they're listed as stock-keeping units, or SKUs.*

Are there certain types of services that will be more conducive to the SKU approach? We don't have a whole list of where we're going with SKUs. We've got a product marketing organization that will make sure it looks at the opportunities. But I think essentially the platform opportunities are things we know we can do because we do them inside and we do them with customers. Where customers are having pain today, you look at that and understand what part is difficult and how do we solve that — or where customers have adopted technology, but they're not using it productively. Customers ask us all the time: "We want to run it just like you do. You're successful with it. How can we be successful?"

So you like the idea of productizing services as much as possible? I'm not saying it's the only way to do it. I'm saying it's a way we know that works. We've codified it. We've tested it. We've proven it. And why not share that? Frankly, it's something IT can't do. They've got day jobs. It's something that our consulting and support organization can do. And it's something that, as we have to train our support people and our consultants, we absolutely can build the same [intellectual property] for partners.

What will be the first SKU? The first one is around Exchange [Server]. It'll be a combination of SKUs, starting with looking at the overall health of the environment. How do you measure it? How do you monitor it? What's the availability of [the customer's] Exchange servers worldwide? . . . [That SKU will grow] to, how do you deploy [Exchange] and how do you really support it once it's in place?

When will Microsoft introduce the first one? We'll be using it internally in this half of the [fiscal] year, and we'll be offering it to partners sometime during the second half. We've got a lot to learn about the difference between what this concept is and how you train somebody to do it. Today, they suggest we take people out of IT and marry them with consultants. But that doesn't scale. There's really got to be training. There's got to be certification or accreditation.

Will customers in the future be able to find a catalog of SKUs for services? Yes. We want to broadly market these SKUs, and they can be delivered by Microsoft or by partners. I don't think it's something customers will do for themselves, because you need to be accredited and trained on it.

Will Microsoft ever be the sole service provider, or will you always work with partners? Certainly, in the original stage, we'll do it because we've got to prove it. We've got to build it. And we've got to market it, because unless there's a broad umbrella that says one of these Microsoft things is good and there's proof points to it, there's no way to scale it up. So we'll start with them. But the only way to really reach velocity is to have partners enabled to do that.

Will the service SKUs be offered under Microsoft Consulting Services? For both Microsoft Consulting Services and in Premier [Support]. I tend to think of those two organizations as our enterprise services group.

Does this put you into competition with your partners to some degree? I don't think so at all. We're really talking about building out an asset for the partner and customer channel. But we have to prove that it works. And this concept of having a very prescriptive way to do something that works in a heterogeneous environment — that gets the guaranteed predictable results we're talking about — we haven't found it to be an easy thing to do. So we need to make sure that we can do it and we know how you need to be trained to do it and that you can do it profitably. Ⓠ 55676

Senators Call on DHS to Improve Cybersecurity

Official admits that there's still work to be done

BY GRANT GROSS

The U.S. Department of Homeland Security needs to develop a recovery plan for a widespread attack on the Internet, and it needs stable leadership in cybersecurity, a government investigator told a Senate subcommittee last week.

While the DHS can track Internet threats, it doesn't have an Internet recovery plan or a national cybersecurity threat assessment procedure, David Powner, director of IT management in the Government Accountability Office (GAO), told a subcommittee of the Senate Homeland Security and Governmental Affairs Committee. More work needs to be done, he said.

"Until DHS addresses its many challenges . . . it cannot function as a cybersecurity focal point for coordinating federal law and policy," Powner said. "The result is increased risk. Large portions of our critical infrastructure are unprepared to effectively handle a cybersecurity attack."

Senators echoed Powner's criticisms, first outlined in a GAO report released in May [QuickLink 54662].

"The United States does not have a robust ability to detect a coordinated attack on our critical infrastructure, nor does it have a measurable recovery and reconstitution plan for key mechanisms of the Internet and telecommunications system," said Sen. Tom Coburn (R-Okla.), chairman of the Federal Financial Management, Government Information and International Security Subcommittee.

The DHS is working hard to improve U.S. cybersecurity efforts, said Andy Purdy, acting director of the DHS's National Cyber Security Division. A draft of a national infrastructure vulnerability assessment, which includes a cybersecurity assessment, should be completed in a couple of months. The DHS Internet Disruption Working Group is developing a plan for Internet recovery after a major attack, Purdy said.

Pushing IPv6

The division is also supporting efforts to push IPv6, a more secure version of the current Internet Protocol, Purdy said. The division is encouraging software vendors to create more-secure products, and it plans to renew efforts to work with other agencies and companies to identify significant threats, he said.

Purdy also noted that the DHS plans to create the post of assistant secretary for cyber- and telecommunications security. He said that the new hire should bring an end to the high turnover in the division's leadership and "accelerate" cybersecurity efforts.

"We believe [the GAO report] has provided a fair assessment of the progress to date and agree that while considerable work has been done, much work remains to meet the challenges in this rapidly changing area," Purdy said.

Sen. Thomas Carper (D-Del.) repeated longstanding complaints that cybersecurity issues take a back seat to physical security issues at the DHS. Senators also raised concerns about the possibility of attacks on Internet-based controls for utilities such as waste management plants or the electric grid.

Powner listed a number of criticisms of DHS cybersecurity efforts, including what the GAO sees as problems it has had developing relationships with state and federal agencies and private industry. The DHS also has no generally accepted methodologies for analyzing Internet attacks and hasn't fully developed a plan for responding to attacks, he said. Ⓠ 55678

Gross writes for the IDG News Service.

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DON TENNANT

Never Mind

REMEMBER LAST WEEK when I wrote about having noticed an advertisement for HP World and how I learned from the ad that the conference, sponsored by the Interex user group, would be held in August? Remember how I commended Hewlett-Packard for supporting HP World despite the fact that it was slated to hold its first unified user conference, the HP Technology Forum, a month later?

Never mind. HP World, as you probably know by now, isn't happening.

No one was more blown away than I was when Patrick Thibodeau broke the story on our Web site on the Monday morning our print edition was hitting the streets: HP World had been canceled the day before, and Interex was shutting down [QuickLink 55630]. Why would Interex place an ad to attract registrations to HP World one week, only to cancel the show the next? How could all of this have happened so suddenly and without warning?

I don't know the answer to either question. But I do know that this is a glaring indication of some pretty shoddy management, and you can't blame HP for that. Many people will slam HP for killing HP World — and, by extension, Interex, since the event was the main source of the group's revenue — by starting its own user conference and convincing the two other top independent HP user groups to support it.

But no one can argue that it was HP that pulled the rug out from under Interex's members last week. The Interex leadership did that itself. And there's no excuse for it.

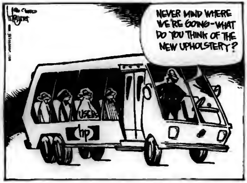
Interex had plenty of time to determine whether holding HP World was a viable proposition at all, let alone one month before the HP Technology Forum. It appears now that the decision to go it alone was based on wishful thinking, blind stubbornness or a combination of the two. The desire to retain an independent user conference was commendable, but actually trying to do it was probably shortsighted. And blindsiding its membership at the last minute was just plain stupid.

So now all eyes are on the HP Technology Forum to be held in September. Remember last week when I wrote that there's a "scheduling conflict" that's going to prevent HP CEO Mark Hurd from attending this signature HP user conference? Remember how I noted that Hurd will be giving a keynote at Oracle OpenWorld the following week and how I found it *peculiar* that Hurd was able to carve out the time to speak to Oracle'a users but not his own? Never mind. Now that I've had another week to think about it, I find it not peculiar but absolutely *outrageous.*

In the week since then, we've learned that the rumors were true and that HP is indeed undergoing a major restructuring that will leave it with 10% fewer workers and make the Customer Solutions Group — the organization responsible for selling to corporate and government users — go away. It seems incomprehensible that Hurd would fail to show up at this key inaugural event to explain these and other restructuring-related moves to his users.

If Hurd indeed stays away, Ann Livermore, the executive vice president who's slated to deliver the main keynote, will be left in the awkward position of having to explain his absence. I'd hate to see that happen to the person who should have gotten the nod to replace Carly Fiorina in the first place. Ⓠ 55704

Don Tennant


NEVER MIND WHERE WE'RE GOING—WHAT DO YOU THINK OF THE NEW UPHOLSTERY?
USERS
hp

DAN GILLMOR

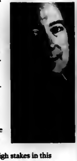
Intel May Have Itself To Blame

INTEL ISN'T the world's biggest maker of microprocessors for nothing. Among manufacturing companies, it surely ranks among the most adept, and it has a long history of innovation.

But Intel is also known for its competitive nature — a rough and sometimes mean style that has always come close to the edge of what's acceptable. And it's the nastier part of the company's character that's being, once again, called sharply to account.

The latest questions or, more accurately, accusations have surfaced in the form of a lawsuit recently filed by Advanced Micro Devices, Intel's chief competitor. I've read the complaint, and this is serious stuff.

AMD is alleging a host of offenses, but the case boils down to whether Intel has used illegal or merely nasty tactics to maintain its chip dominance. If the allegations of illegal behavior are true — and, needless to say, Intel has denied them — Intel may be in some real trouble this time.



There are some high stakes in this battle, and not just for Intel. The stakes for IT are real too. If AMD prevails, computer buyers will see more choices and lower prices.

Which is not to say that price-cutting and innovation haven't been occurring in the Intel architecture. Largely thanks to AMD, both have occurred. AMD's 64-bit migration strategy — helping customers by ensuring that 32-bit applications would keep working — and dual-core processors have been examples of the kind of leadership for which Intel was once more famous.

Intel isn't a stranger to antitrust issues. In the 1990s, it stayed pretty much above the fray as Microsoft, its partner in the Wintel alliance, faced a series of harsh charges. Intel had schooled its workers to avoid saying and doing the kinds of things that got Microsoft in such trouble.

Indeed, people I talked with at Intel during the epic Microsoft trial were baffled that the software giant seemed not only to have no serious internal policies to avoid such trouble, but also that Microsoft executives were so flagrantly dismissive of government officials and their duties.

Intel's sensitivity had shone through in another way. At one point, the company backed away from what seemed to be a push to dominate the motherboard market as it had done with chips. I had always assumed that Intel, already immensely profitable and powerful, had done this largely to avoid any antitrust complications.

Microsoft, in the end, avoided serious sanctions for its behavior. The Bush administration, in its odious deal with the software company, all but announced that monopolists could get away with just about anything on its watch. I wonder if Intel concluded that it, too, now had a free pass. If so, the chip maker may have made a mistake.

Antitrust law is evolving at a fairly rapid pace these days, and there are legitimate questions about whether it's appropriate in a fast-moving industry like technology. I believe it is, but there's at least a solid intellectual argument that hard-nosed enforcement may deter innovation.

I believe Intel would be better off if it acted as if strong enforcement was going to occur no matter what. Tough but honorable competition, not knife fights, should be the heartbeat of capitalism. 55479

DAVID BOWES

On-the-Job Seasoning of An IT Pro

LIKE MOST IT managers, I always aimed to create a bottom-line impact through the use of technology, reduce the mystery surrounding IT and adopt standard business management techniques. Unfortunately, these efforts generally didn't have the intended result. Most CEOs still don't seem to grasp the potential of business transformation coupled with IT. But this is our fault as much as theirs.

What can we do to remedy this situation? The answer lies in training, but I'm talking about something more than a class for your business executives to learn how to use a spreadsheet. I'm talking about a widespread learning environment — a culture of learning.

Of all the manufacturing and distribution firms I've worked for, only one successfully created a learning environment for all its senior managers that became the prism through which we managed staff and related to one another. This 100-year-old food-processing company has always believed that things should be done the right way. It doesn't shy away from change and feels that it's fair to ask new senior managers to learn about the company before directing their employees to follow them into uncharted waters. In fact, all employees learned the company culture by receiving on-the-job training.

New managers had to spend four months away from home, trimming and tying meat, coating poultry with spices, loading cooking trees, unloading metal containers of cooked product — performing the majority of the most laborious jobs in the plant under demanding conditions for 10 hours each day. We ate our lunch with everyone in the cafeteria. All of our experiences were recorded weekly for peer review and suggestion.

I completed the hands-on training but didn't fully appreciate the lessons learned until one year later, when assembling an ERP request for proposals. My time on the factory floor helped me understand how those operations could benefit from a properly implemented ERP system. For example, line personnel wanted to see how their efforts in total production and scrap containment compared with those of other plants in order to promote best practices that worked; facilities managers dreamed of a global spare-parts inventory that could be queried using multiple word combinations, parts characteristics or parts dimensions to avoid unnecessary purchases and speed the right parts to a machine; and management wanted to know more about retail-store case temperatures and storage practices compared with our internal standards by using a passive data-gathering process that our distributors used. Having worked alongside all these people, I didn't have to guess what would be beneficial for them and provide value-add for the company.

But as I said, I've worked for only one company that pursued this sort of training. Still, I think all managers should understand the ins and outs of many of the routine procedures within their organizations and take the time to perform these tasks. If your company doesn't provide this type of training, ask your human resources director and your boss if you can help design a program. Then let others know what you're doing so that they begin to see the value of this sort of training. And carry this thinking into other areas; if a business re-engineering project is planned, for example, be sure to perform hands-on training beforehand.

In the end, you will be better able to identify and project the positive effects of IT because you will have a much clearer appreciation of your firm's true identity and what your users really need. 55563

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READERS' LETTERS

Training Key to Improved E-mail Security

IN THE ARTICLE "Trojan E-mails Suggest Trend Toward Targeted Attacks" [QuickLink 55063], you quote a security analyst as saying that organizations that follow best practices in regard to e-mail security should not be concerned with this new threat. This advice is flat wrong! Updated antivirus signatures, attachment filtering and anti-spam measures aren't enough to identify and mitigate this risk. I have been involved in a network penetration test that targeted individuals using spoofed e-mail and Web pages. We were successful in collecting authentication credentials from over 90% of users. These credentials included network, database and VPN passwords and user IDs, which was enough for us to remotely gain access to all of the data we wanted, completely undetected!

The ultimate solution is not simply updating your antivirus or applying some magical server patch. There are only two ways to mitigate this risk: better user training and strong authentication methods (such as biometrics and smart cards). You can have the strongest network, firewall and intrusion detection in the world, but as long as legitimate users are standing at the gates handing out their keys, then you will never have true security.

Jason Jones
Webmaster,
Dallas Baptist University,
webmaster@dbu.edu

Most Identity Theft Occurs Off-line

BRUCE SCHNEIER, chief technology officer at Counterpane Internet Security Inc., says that shredding your trash "is completely obsolete advice" ["Hackers Score Big by Thinking Small, Experts Say," QuickLink 55151]. He and I must be reading different sources. While there has been an uptick in identity theft via computers just within recent months, more than 85% of identity theft still occurs from sources that are not online. Shredding your trash is still sound advice.

Michael Quigley
AS/400 programming
section coordinator,
New Knoxville, Ohio

Gates Is a Mystery

I AM CONFUSED! First Bill Gates bangs the table for more H-1Bs, and now this ["Gates Warns Against Reliance on Outsourcing," QuickLink a6570]. Does he or does he not want American engineers and IT?

James Murphy
North Hills, Calif.

Apple Doesn't 'Tie'

YOU SHOULD TALK to an antitrust lawyer before you run an article accusing Apple of "tying" ["Mac OS on a Dell? Dell in Favor, Apple Opposed," QuickLink a6540]. Tying is illegal only if the company has some degree of market power. For example, Microsoft was sued for tying Internet Explorer to Windows because it had such a dominant position in the operating systems market. Apple, with relatively small market share in hardware or operating systems, could probably not be sued successfully for tying under antitrust law.

Jonathan Lamberson
Student, Harvard Law School,
Cambridge, Mass.

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DON TENNANT

Never Mind

REMEMBER LAST WEEK when I wrote about having noticed an advertisement for HP World and how I learned from the ad that the conference, sponsored by the Interex user group, would be held in August? Remember how I commended Hewlett-Packard for supporting HP World despite the fact that it was slated to hold its first unified user conference, the HP Technology Forum, a month later?

Never mind. HP World, as you probably know by now, isn't happening.

No one was more blown away than I was when Patrick Thibodeau broke the story on our Web site on the Monday morning our print edition was hitting the streets: HP World had been canceled the day before, and Interex was shutting down [QuickLink 55630]. Why would Interex place an ad to attract registrations to HP World one week, only to cancel the show the next? How could all of this have happened so suddenly and without warning?

I don't know the answer to either question. But I do know that this is a glaring indication of some pretty shoddy management, and you can't blame HP for that. Many people will slam HP for killing HP World — and, by extension, Interex, since the event was the main source of the group's revenue — by starting its own user conference and convincing the two other top independent HP user groups to support it.

But no one can argue that it was HP that pulled the rug out from under Interex's members last week. The Interex leadership did that itself. And there's no excuse for it.

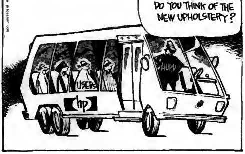
Interex had plenty of time to determine whether holding HP World was a viable proposition at all, let alone one month before the HP Technology Forum. It appears now that the decision to go it alone was based on wishful thinking, blind stubbornness or a combination of the two. The desire to retain an independent user conference was commendable, but actually trying to do it was probably shortsighted. And blindsiding its membership at the last minute was just plain stupid.

So now all eyes are on the HP Technology Forum to be held in September. Remember last week when I wrote that there's a "scheduling conflict" that's going to prevent HP CEO Mark Hurd from attending this signature HP user conference? Remember how I noted that Hurd will be giving a keynote at Oracle OpenWorld the following week and how I found it *peculiar* that Hurd was able to carve out the time to speak to Oracle's users but not his own? Never mind. Now that I've had another week to think about it, I find it not peculiar but absolutely *outrageous*.

In the week since then, we've learned that the rumors were true and that HP is indeed undergoing a major restructuring that will leave it with 10% fewer workers and make the Customer Solutions Group — the organization responsible for selling to corporate and government users — go away. It seems incomprehensible that Hurd would fail to show up at this key inaugural event to explain these and other restructuring-related moves to his users.

If Hurd indeed stays away, Ann Livermore, the executive vice president who's slated to deliver the main keynote, will be left in the awkward position of having to explain his absence. I'd hate to see that happen to the person who should have gotten the nod to replace Carly Fiorina in the first place. 🅠 55704

Don Tennant


NEVER MIND WHERE WE'RE GOING–WHAT DO YOU THINK OF THE NEW UPHOLSTERY?
HURD
USERS
hp

DAN GILLMOR

Intel May Have Itself To Blame

INTEL ISN'T the world's biggest maker of microprocessors for nothing. Among manufacturing companies, it surely ranks among the most adept, and it has a long history of innovation.

But Intel is also known for its competitive nature — a rough and sometimes mean style that has always come close to the edge of what's acceptable. And it's the nastier part of the company's character that's being, once again, called sharply to account.

The latest questions or, more accurately, accusations have surfaced in the form of a lawsuit recently filed by Advanced Micro Devices, Intel's chief competitor. I've read the complaint, and this is serious stuff.

AMD is alleging a host of offenses, but the case boils down to whether Intel has used illegal or merely nasty tactics to maintain its chip dominance. If the allegations of illegal behavior are true — and, needless to say, Intel has denied them — Intel may be in some real trouble this time.

There are some high stakes in this battle, and not just for Intel. The stakes for IT are real too. If AMD prevails, computer buyers will see more choices and lower prices.

Which is not to say that price-cutting and innovation haven't been occurring in the Intel architecture. Largely thanks to AMD, both have occurred. AMD's 64-bit migration strategy — helping customers by ensuring that 32-bit applications would keep working — and dual-core processors have been examples of the kind of leadership for which Intel was once more famous.

Intel isn't a stranger to antitrust issues. In the 1990s, it stayed pretty much above the fray as Microsoft, its partner in the Wintel alliance, faced a series of harsh charges. Intel had schooled its workers to avoid saying and doing the kinds of things that got Microsoft in such trouble.

Indeed, people I talked with at Intel during the epic Microsoft trial were baffled that the software giant seemed not only to have no serious internal policies to avoid such trouble, but also that Microsoft executives were so flagrantly dismissive of government officials and their duties.

Intel's sensitivity had shone through in another way. At one point, the company backed away from what seemed to be a push to dominate the motherboard market as it had done with chips. I had always assumed that Intel, already immensely profitable and powerful, had done this largely to avoid any antitrust complications.

Microsoft, in the end, avoided serious sanctions for its behavior. The Bush administration, in its odious deal with the software company, all but announced that monopolists could get away with just about anything on its watch. I wonder if Intel concluded that it, too, now had a free pass. If so, the chip maker may have made a mistake.

Antitrust law is evolving at a fairly rapid pace these days, and there are legitimate questions about whether it's appropriate in a fast-moving industry like technology. I believe it is, but there's at least a solid intellectual argument that hard-nosed enforcement may deter innovation.

I believe Intel would be better off if it acted as if strong enforcement was going to occur no matter what. Tough but honorable competition, not knife fights, should be the heartbeat of capitalism. **55479**

DAVID BOWES

On-the-Job Seasoning of An IT Pro

LIKE MOST IT managers, I always aimed to create a bottom-line impact through the use of technology, reduce the mystery surrounding IT and adopt standard business management techniques. Unfortunately, these efforts generally didn't have the intended result. Most CEOs still don't seem to grasp the potential of business transformation coupled with IT. But this is our fault as much as theirs.

What can we do to remedy this situation? The answer lies in training, but I'm talking about something more than a class for your business executives to learn how to use a spreadsheet. I'm talking about a widespread learning environment — a culture of learning.

DAVID BOWES has over 20 years of diverse customer-focused IT management and consulting experience. You can contact him at dbowes@optonline.net

Of all the manufacturing and distribution firms I've worked for, only one successfully created a learning environment for all its senior managers that became the prism through which we managed staff and related to one another. This 100-year-old food-processing company has always believed that things should be done the right way. It doesn't shy away from change and feels that it's fair to ask new senior managers to learn about the company before directing their employees to follow them into uncharted waters. In fact, all employees learned the company culture by receiving on-the-job training.

New managers had to spend four months away from home, trimming and tying meat, coating poultry with spices, loading cooking trees, unloading metal containers of cooked product — performing the majority of the most laborious jobs in the plant under demanding conditions for 10 hours each day. We ate our lunch with everyone in the cafeteria. All of our experiences were recorded weekly for peer review and suggestion.

I completed the hands-on training but didn't fully appreciate the lessons learned until one year later, when assembling an ERP request for proposals. My time on the factory floor helped me understand how those operations could benefit from a properly implemented ERP system. For example, line personnel wanted to see how their efforts in total production and scrap containment compared with those of other plants in order to promote best practices that worked; facilities managers dreamed of a global spare-parts inventory that could be queried using multiple word combinations, parts characteristics or parts dimensions to avoid unnecessary purchases and speed the right parts to a machine; and management wanted to know more about retail-store case temperatures and storage practices compared with our internal standards by using a passive data-gathering process that our distributors used. Having worked alongside all these people, I didn't have to guess what would be beneficial for them and provide value-add for the company.

But as I said, I've worked for only one company that pursued this sort of training. Still, I think all managers should understand the ins and outs of many of the routine procedures within their organizations and take the time to perform these tasks. If your company doesn't provide this type of training, ask your human resources director and your boss if you can help design a program. Then let others know what you're doing so that they begin to see the value of this sort of training. And carry this thinking into other areas; if a business re-engineering project is planned, for example, be sure to perform hands-on training beforehand.

In the end, you will be better able to identify and project the positive effects of IT because you will have a much clearer appreciation of your firm's true identity and what your users really need. **55563**

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READERS' LETTERS

Training Key to Improved E-mail Security

IN THE ARTICLE "Trojan E-mails Suggest Trend Toward Targeted Attacks" [QuickLink 55083], you quote a security analyst as saying that organizations that follow best practices in regard to e-mail security should not be concerned with this new threat. This advice is flat wrong! Updated antivirus signatures, attachment filtering and antispam measures aren't enough to identify and mitigate this risk. I have been involved in a network penetration test that targeted individuals using spoofed e-mail and Web pages. We were successful in collecting authentication credentials from over 90% of users. These credentials included network, database and VPN passwords and user IDs, which was enough for us to remotely gain access to all of the data we wanted, completely undetected!

The ultimate solution is not simply updating your antivirus or applying some magical server patch. There are only two ways to mitigate this risk: better user training and strong authentication methods (such as biometrics and smart cards). You can have the strongest network, firewall and intrusion detection in the world, but as long as legitimate users are standing at the gates handing out their keys, then you will never have true security.

Jason Jones
Webmaster,
Dallas Baptist University,
webmaster@dbu.edu

Most Identity Theft Occurs Off-line

BRUCE SCHNEIER, chief technology officer at Counterpane Internet Security Inc., says that shredding your trash "is completely obsolete advice" ["Hackers Score Big by Thinking Small, Experts Say," QuickLink 55151]. He and I must be reading different sources. While there has been an uptick in identity theft via computers just within recent months, more than 85% of identity theft still occurs from sources that are not online. Shredding your trash is still sound advice.

Michael Quigley
AS/400 programming
section coordinator,
New Knoxville, Ohio

Gates Is a Mystery

I AM CONFUSED! First Bill Gates bangs the table for more H-1Bs and now this ["Gates Warns Against Reliance on Outsourcing," QuickLink a6570]. Does he or does he not want American engineers and IT?

James Murphy
North Hills, Calif.

Apple Doesn't 'Tie'

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TECHNOLOGY

07.25.05

Health Services
IT leaders at health care organizations, such as Furrukh Khan at Ohio State University Medical Center (right), are using Web services to move information among disparate systems and, ultimately, improve patient care. **Page 26**

SECURITY MANAGER'S JOURNAL
Getting Started on Database Security
C.J. Kelly takes a look at the security of her employer's information assets and realizes that the application layer is the weak link. **Page 32**

QUICKSTUDY
RATs
Remote administration Trojans are pieces of malicious software that let intruders remotely control computers across a network or through the Internet. **Page 34**

UP FROM A Low-Quality QUAGMIRE

By using application life-cycle management, some companies are trying to exterminate software bugs and reduce the costs they incur.

By Sue Hildreth

THE HORROR STORIES HAVE BECOME ALL TOO FAMILIAR:

- In April, a software glitch resulted in the loss of thousands of dollars for US Airways Group Inc. when some tickets were mistakenly priced at $1.86.
- In the latest U.S. presidential election, reports of incorrect tallies surfaced in several districts that were using new computerized voting machines.
- A software bug apparently caused the largest power outage in North America, the Northeast blackout of August 2003, which threw millions of people into darkness.

The list could go on and on. And the problem, it seems, is only getting worse. According to one oft-quoted number from the National Institute of Standards and Technology, flawed software cost the U.S. economy $60 billion in 2002. No one doubts that the number is even higher today.

Bad software plagues nearly every organization that uses computers, causing lost work hours during computer downtime, lost or corrupted data, missed sales opportunities, high IT, support and maintenance costs, and low customer satisfaction.

In frustration, CIOs are taking a hard look at how bugs get into the application development process and why they seem to be so

ABCs OF SOFTWARE METHODOLOGIES

Know what RUP, CMM or XP mean? Here's a quick lesson on development methodologies.

There are a handful of well-known methodologies in software development circles. One common one is IBM Rational's **RUP, or Rational Unified Process**, a framework that includes both best practices and technology tools and that identifies four phases of application development: inception, elaboration, construction and transition. An extension to RUP called the **Enterprise Unified Process**, created by Scott Ambler of Ronin International Inc., adds two phases, production and retirement.

Another standard is the Software Engineering Institute's **Capability Maturity Model Integration**, an update to the SEI's original Capability Maturity Model. CMMI promotes the notion of cyclical feedback and improvement as a characteristic of a top-quality IT organization. CMMI defines five levels of software process maturity ranging from Level 1 (initial), characterized by ad hoc methods and unpredictable results, to Level 5 (optimized), when the organization has measurable, continuous process improvement. One other well-known practice is **Extreme Programming, or XP,** which also stresses iterative development, constant testing and collaborative development.

Iterative development is a key issue, says Joshua Barnes, a consultant at Ajilon LLC in Jacksonville, Fla. Unlike the "waterfall" approach, in which a project progresses from stage to stage, iterative development lets successive increments of the project go though the cycles, allowing for constant feedback and course corrections. "It's never beneficial to use a waterfall approach, in my opinion," says Barnes. But the iterative methodology is a cultural change and is often challenging for people to follow, he says.

- Sue Hildreth

hard to prevent. The consensus: It's not one specific failure but a series of disconnects and miscommunications among the IT specialists involved in the planning, development, testing and maintenance of each application.

The problem, say those who study bad software, is a failure to manage the life cycle of software and recognize that any effort to improve software quality must span all of the stages of the application's life, from initial planning to postdeployment and maintenance.

Berkshire Life Insurance Company of America, a subsidiary of The Guardian Life Insurance Company of America in New York, has been examining ways to improve quality throughout the application life cycle.

"In the past year, we have looked at our development process, at our requirements-gathering methodology and at the way we monitor systems," explains Sorin Fiscu, project manager and IT rapid application development team leader at Berkshire Life.

Fiscu's team has implemented changes such as involving the quality assurance (QA) staff in the early planning stages, soliciting input from business analysts and automating more of the testing phase. These changes have enabled the company to meet or exceed two of its goals for postdeployment: application availability and overall user satisfaction with the application.

One of the first steps in the development of an application at Berkshire Life is bringing business users and IT together to agree upon the functional specifications of the application, listing every feature and function that the business users need, from the flow of screens to the names of data fields.

"It's a very detailed picture of the application and how it will be used," says Fiscu. "The key is to get everybody talking upfront. Testers, analysts and developers need to communicate as much as possible."

The basic goals of application life-cycle management (ALM) are fairly straightforward. They include ensuring adequate communication between the teams responsible for each stage and preventing errors from progressing through the cycle, since it costs more to fix errors later in the development process than at the beginning.

[redacted]

"The life cycle may appear obvious, but most organizations — close to about 90% — do not know how to effectively manage the life cycle," asserts Theresa Lanowitz, an analyst at Gartner Inc. "If the life cycle was truly embraced with the right people, process and technologies, we would see better-quality software and more efficient and effective IT organizations. As it is, most IT organizations waste quite a bit of their budget because they have bad business practices, fail to deliver on requirements and fail to manage projects to meet schedule, cost and quality goals."

Quality From the Start

Establishing clear communication channels among developers, testers and the business users is critical to successful life-cycle management. This needs to be made part of the process during the planning stage.

At Staples Inc., the emphasis is on collaboration among everyone involved in the application's development, testing and use, according to Kathy Murray, senior manager of quality management at the Framingham, Mass.-based office products retailer.

"We meet with our business partners to discuss the business requirements, with QA there as well so they understand the requirements," she says. "The more time we spend in the definition phase, the better later phases go. There are studies that say 60% to 70% of bugs are introduced during the definition stage, and we find that to be true."

Poor requirements are the root of most QA problems, says Arthur Povlot, an Atlanta-based business development manager at Tescom Software Systems Testing Ltd., a provider of QA services. "Very seldom do companies implement quality 'gates' at the requirements stage. For instance, you should have the requirements audited and signed off on by the people involved — business analysts, marketing managers, subject matter experts, etc.," he says.

Programmers tend to like to do things their own way. And though it's probably counterproductive to bog developers down with red tape, it's nevertheless a good idea to implement some processes and procedures for consistency and quality control.

Fiscu highly recommends requiring developers to perform specific QA tests on their code before handing it off — bugs and all — to the QA staff to fix. "Our development team receives a set of unit test scripts, like a high-level checklist. Development is done only when the checklist is done," he says. "This way, we make sure we don't push high-level defects from development into the test environment."

Another common difficulty in development that breeds software errors is keeping track of changes and versions. Configuration management and change management policies and tools help enforce a standard process for creating and testing code.

American Greetings Corp. in Cleveland, for instance, relies on AllFusion Change Manager from Computer Associates International Inc. to track changes to its code throughout the development process and enforce company standards for development.

"Someone can't decide to use a different compiler, for instance, or skip a test, because it's all built into the process" in AllFusion, says Tom Brown, software manager at American Greetings. "To manage the life cycle means to keep the source code as current and consistent as far as the type of processes and compilers that we used."

Testing and More Testing

While developers should do some early testing as they go, a full-blown testing process/department is crucial to finding and fixing bugs. After developers pass off the code, it should be subjected to a variety of thorough checks, including functional testing to evaluate the flow and functional correctness of the program, integration testing, performance testing, security testing, and regression testing of updates and changes to a program.

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The Chicago Board of Trade performs a number of manual and automated tests on applications, including unit testing by developers, performance testing using QACenter from Compuware Corp. and user-acceptance testing or functional testing by the traders and brokers who will use the software. CBOT also tests with an eye toward growth and heavier traffic in the future.

"We are proactive, not reactive, so we test for future loads the systems may experience," says David Burkhart, director of quality assurance at CBOT.

Because of limits on time, technology and human capabilities, even the most sensitive, mission-critical systems can't be tested to 100% assurance. The question becomes one of how many tests to make and how much time to take. Povlot advises creating test cases for 100% of the application's most critical requirements. (Test cases are lists of the input and expected responses needed to test a particular feature.) Overall, he says, you should be testing 90% of all requirements.

Automated tools can help speed test planning and execution, especially for regression testing. "We've decreased our test cycle man-hours by 50%, enabling us to increase test coverage by 300%," says Murray, who credits the improvement to Staples' use of SilkTest by Segue Software Inc. and StarTest from Star Quality in Hopkinton, Mass.

Berkshire Life Insurance uses Empirix Inc.'s e-Test Suite to manage the testing process and speed regression testing. "The more enhancements we added, the more time the regression phase of testing took. Now automation frees up resources and also ensures consistency," says Fiscu.

Closing the Loop

Once deployed, an application must be monitored and maintained. Soon, updates to the software will begin a fresh application life cycle, so information collected during production must be fed back into the requirements planning of the next rendition.

That is the strategy that The Dow Chemical Co. in Midland, Mich., follows. Dow's IT staff runs a variety of test scripts on new applications, using LoadRunner from Mercury Interactive Corp. After deployment, many of those scripts are run again, this time using one of Mercury's monitoring packages — Topaz or SiteScope — to compare the results. Should a problem with the application be detected, the operations staff at Dow conducts an incident-review process to determine the cause.

"Then we send that information back to development, or to the infrastructure or service teams, to make the appropriate changes," says Rich Guidotti, lead architect specialist in Dow Chemical's information systems group.

> " We are proactive, not reactive, so we test for future loads the systems may experience.
>
> **DAVID BURKHART, DIRECTOR OF QUALITY ASSURANCE, CHICAGO BOARD OF TRADE**

CBOT also uses Compuware monitoring software to catch problems. "We close the loop after it goes into production. If something happens once it's in production, we'll have a meeting to discuss it, and that feedback goes directly to QA," says Burkhart.

A wide range of vendors has products for one or more stages of the life cycle. A few are beginning to assemble suites aimed at being complete life-cycle management systems. IBM's Rational unit provides an end-to-end product line, ranging from its RequisitePro for gathering requirements, modeling tools and testing tools to the postdeployment monitoring and maintenance products of IBM's Tivoli software.

Likewise, Mercury, Compuware, CA and Segue Software all either purport to or plan to expand their product coverage to hit every major phase of the application life cycle.

Although an integrated platform might be an ideal, the current reality is that organizations must select various products from different vendors to automate portions of the life cycle, such as requirements management, automated functional testing and postdeployment monitoring. Some offer interfaces to complementary products, but many do not, or at least not to every one a customer may happen to own.

But life-cycle management is as much a matter of processes as it is the automated technology tools used to support it. So, integrated platform or not, say experts, the goal of ALM is to minimize errors and omissions and increase the quality of the product.

Or, as CBOT's Burkhart says, it's a matter of learning from past mistakes and not reliving them in each new cycle of the application. "One of my underlying goals is to never repeat a mistake," he says. "Everyone makes mistakes; if they didn't, we wouldn't need to test anything. But we strive to have quality processes in place to prevent us from repeating mistakes." 55486

Hildreth is a freelance writer in Waltham, Mass. She can be reached at Sue.Hildreth@comcast.net.

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HealthSERVICES

■ Web services and SOAs are helping health care companies integrate systems, save money and improve patient care. **By John S. Webster**

HOSPITAL IT infrastructures form a complex transactional environment in which pulling applications and information together can be not just mission-critical, but also a matter of life and death.

Entrenched proprietary systems store patients' clinical, radiological, demographic and billing information as text, images and voice-annotated reports. That information must be dealt with in accordance with strict clinical priorities and federal regulations. An increasing number of health care organizations are using Web services and service-oriented architectures to make critical connections in their information systems.

"We are building SOAs and Web services that will not only integrate different systems, but also take care of the hospital's rules — a heart operation cannot be performed on the second floor, or anesthesia equipment cannot be located in the cafeteria, for example," says Furrukh Khan, director of the Collaborative for Applied Software Technology at Ohio State University Medical Center in Columbus.

Khan and his staff have developed a Microsoft .Net-based SOA that includes Web services for connecting hospital monitoring equipment to back-end databases. Since .Net licenses were already in place, the Web services were developed for very little cost, Khan explains.

Using Microsoft Indigo and Microsoft Web Services Enhancements for .Net, which provide standards-based security and other features to the Visual Studio .Net and .Net frameworks, Khan and his staff have linked anesthesia systems with the hospital's location services, which are stored in a McKesson Corp. hospital information system. As a result, physicians and other authorized users can view a patient's picture and vital signs remotely on a Web browser, says Khan.

Without Web services, the task of integrating patient data in the clinical and departmental systems scattered throughout hospital facilities has been monumental, say hospital CIOs.

"I have clinical software from 17 vendors. All you're really trying to do is service the organization and doctors, but it's a terrible struggle to get information between the different electronic environments," says John Wade, vice president and CIO at Saint Luke's Health System Inc. in Kansas City, Mo.

Saint Luke's uses systems from multiple hospital software vendors, and even with in-house programming staff and funds at his disposal for integration projects, Wade says it's still very difficult to get information from one electronic environment to another.

For example, the hospital has developed a custom XML-based application for its Web portal. Called Post-It Note, the application translates Dictaphone voice into data to allow physicians to view and annotate a radiologist's voice-based report on a Web browser. The patient data resides in a system from San Francisco-based McKesson. The use of XML has made the application a service that's accessible to a variety of systems, says Wade.

Part of the difficulty in making information available to multiple systems has been the need to comply with entrenched hospital data-transaction standards such as the Health Level 7 protocol. HL7 is used for interdepartmental patient-data transactions among clinical systems, including hospital information systems and radiology, laboratory and cardiology systems. However, custom programming has

ANDY SNOW

often been required to integrate hospital systems that use HL7 with systems that don't use the protocol — essentially any software that's not health-care-specific, including reporting and billing applications. As a result, hospitals can have hundreds of HL7 interfaces among systems that trade basic patient data, according to hospital IT officials.

Hospital enterprise application vendors have had to provide interfaces and consulting services to their customers to ensure that all systems work together. However, this is cumbersome and isn't achieving true integration, according to Barry Runyon, an analyst at Gartner Inc. in Stamford, Conn.

"Hospitals are a heterogeneous environment with regard to platforms and applications, and by passing around HL7 to 10 different systems, they don't integrate; they interface," says Runyon. "Integration is far more intimate and requires knowledge of workflow, as well as a security model and other specifications."

More difficulty has arisen because vendors have been slow to relinquish their captured customer bases by making their applications easier to integrate with competing systems. Even when two systems support HL7, IT staffers have had to create custom interfaces to make them work together.

"Hospital system vendors don't play well with others," says Ken Thomson, chief architect at the University of North Carolina Health Care System in Chapel Hill. "If you want to integrate their software with lots of other systems, you're out of luck. We developed our own XML-based facades to their applications. They're starting to realize they're never going to own the space. In the end, the customer will be the 800-pound gorilla that changes this, because they need direct access to those applications."

At Boston-based CareGroup Healthcare System, Web services technology has provided an efficient means of making diverse systems work together, says John Halamka, CIO of the four-hospital network. Using development products that were already in place, Halamka's staff built an XML-based application called CareWeb to link 12,000 users on 146 internal clinical information systems — including laboratory, radiology and pharmacy systems — across the organization.

"Web services are the glue that you can use to create a virtual system," says Halamka, who's also a *Computerworld* columnist. "If you want to achieve seamless data integration, you can make your infrastructure one gigantic system or, cheaper and faster, you can use Web services."

Health care has lagged behind other industries in implementing SOAs, for both budgetary and historic reasons. IT budgets in the sector are a fraction of those in other industries. To make matters worse, HL7 didn't include XML support until this past May. Moreover, the industry groups behind Integrating the Healthcare Enterprise (IHE), a 7-year-old project of the Healthcare Information and Management Systems Society and the Radiology Society of North America, are just now planning to include XML schemas in the framework.

Waiting for Standards

IHE officials say they have been waiting for standards bodies such as the World Wide Web Consortium and the Organization for the Advancement of Structured Information Standards to settle on security, identity, manageability and other issues before including full-blown Web services definitions in its framework.

"Even though there is no current work being done within IHE, Web services are in our road-map vision. The key issue is the lack of mature health care standards specifications for Web services," says Glen Marshall, co-chairman of the IHE's infrastructure planning committee and IT architect at Siemens Medical Solutions in Malvern, Pa.

For their part, vendors say they're working on the problem as their customers' IT infrastructures grow more complex and the need increases for customizable XML interfaces that support hospital workflow models.

"With Web services, we're giving our customers a more predictable, reliable means to integrate our software without needing programmers to do the heavy lifting," says Michael Solomon, chief architect at IDX Systems Corp. in South Burlington, Vt. "This requires an investment by the vendors, who have to figure out how to 'expose' their applications, and that's not easy to do, either culturally or philosophically."

As it stands, hospitals are forced to rely on only a few vendors — usually no more than two or three — to ensure that their systems work together. But even then, maintaining application interfaces is a burden on IT staffers.

"Early on, we standardized our applications as part of the selection process to make sure they integrate with each other, and they're all vendor-supported. But we still have dedicated IT people for managing the traditional interfaces," says Nancy Barrett, director of information systems integration and development for the Lifespan health system in Providence, R.I.

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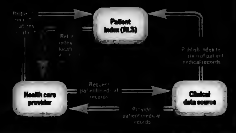
Patient index (RLS)
Health care provider
Clinical data source
Request patient medical records
Provide patient medical records
Publish index to site of patient medical records

beginning to deploy Web services in an SOA have found that the technology not only eases integration between disparate systems but can also help them customize applications to the specific needs of their users.

"The whole one-size-fits-all vendor model is flawed," says Paul Chang, director of radiology at the University of Pittsburgh Medical Center. "The user should be able to create the view they need of the application they're using. A true Web services and SOA model is so promising because I can provide optimized tools to our users without reinventing the wheel. Software should bend to the will of the user, not the other way around."

Whether an organization uses Microsoft's .Net or Java systems from IBM, BEA Systems Inc., Oracle Corp. and others — or both — chances are that it has programmers with the skills needed to develop Web services, says Chang. Established Web services standards such as Simple Object Access Protocol (SOAP) and Web Services Description Language (WSDL), along with more recent standards that govern security and reliability, give IT managers enormous flexibility, he says.

"Our IT lab is split down the middle between programmers who use .Net and those who use Java. . . . I can be completely agnostic. The Web service can be half Java and half .Net. Even Microsoft and IBM will tell you it all works together," Chang says.

New Web services standards make hospital implementations of SOAs possible, says Ohio State's Khan. "Until recently, there were no standards for security, reliable messaging or transactions. SOAP and WSDL were just the starting point. You could discover and talk to eacb other's applications, but you had to do things like security yourself, which makes that part of the service proprietary," he says.

Shift in Thinking

It's precisely the diversity of IT infrastructure that makes a hospital an ideal setting for SOAs. Not only is the environment strewn with proprietary and legacy systems, but the hospital workflow also requires a nimble software architecture to keep data moving smoothly around the enterprise, says Chang.

"Traditional software capabilities aren't enough, and traditional vendors can't keep up because workflow always changes in the hospital," he says. "Imaging modalities alone can change every day."

Although the actual code work to develop Web services isn't difficult, switching to an SOA makes business process analysis crucial, Thomson at the UNC Health Care System says.

"Web services get rid of a lot of the complicated work. The XML piece itself was one of the simplest parts for us to develop. It was much more difficult to work out the business side," be says. "It's very important to know the structure of the XML document. You have to ask tbe right questions to decide things like what the data structure is, or the format of exchange for a medication list."

In small institutions, where both funding and staffing resources are in short supply, the mapping of business processes is important, adds Gartner's Runyon. "Understanding the business requirements is what's difficult. Anyone can write a Web service. But you have to also ask things like, 'Is it properly abstracted?' Moving forward, hospitals will think about integration beforehand. Now, the [electronic medical record] is going to require well-thought-out business issues, both semantically and syntactically. It's a whole other architectural dilemma," he says.

And Web services will become an integral part of the IT planning process because the work of developing custom interfaces for every vendor will be eliminated, say hospital IT managers.

"Much of whether or not to implement Web services boils down to strategy. What organizations with SOAs are doing is putting together the muscle that will broker data from several disparate systems with or without the HL7 limitations," says Scott Ogawa, chief technology officer at Children's Hospital Boston.

The bospital plans to use Web services to exchange data with its external partners in Massachusetts SHARE (Simplifying Healthcare Among Regional Entities), a regional collaborative initiative for data exchange operated by the Massachusetts Health Data Consortium. But Ogawa also sees the potential for the technology inside the organization.

"On the clinical side of things, we're looking for ways to not have to tie systems together using custom interfaces, but rather integrating them with Web services such that we don't have to build broker solutions." **Q 55506**

Webster is a freelance writer in Providence, R.I. He can be reached at john.s.webster@verizon.net.

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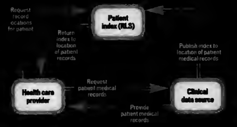
Request record locations for patient
Patient index (RLS)
Return index to location of patient records
Publish index to location of patient medical records
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Summer Reading For Technophiles

LET'S FACE IT: An evocative whiff of cocoa butter can get to even the most serious technology workers among us, inspiring them to ease up just a bit. Perhaps only a few will hunker down on a beach towel with *Harry Potter and the Half-Blood Prince*, but most will be ready for a break from service manuals and all those 5-pound tomes on Linux clustering or Windows forensics.

The following titles should have appeal for the techno-savvy but are intended to provide something more entertaining or speculative than the customary deep dive into a sea of bits and bytes. Two of the books were published recently, but, as with any summer reading list, an old favorite is here as well, ready to be revisited or discovered for the first time.

- **High-Tech Crimes Revealed: Cyberwar Stories From the Digital Front,** by Steven Branigan *(Addison-Wesley, 412 pages, $29.99).* Branigan has pulled off a very difficult balancing act. His be- -the-scenes descrip- s of investigations o cybercrimes have enough dark detail to keep any reader turning the pages, engrossed in how the cases were cracked and the perps brought to justice. But *High-Tech Crimes Revealed* is also intended to be instructive, and through a variety of devices — clear explanations of criminal methods, intriguing statistics, charts, diagrams and tips boxes — it succeeds. Most readers will be entertained and gain a clearer understanding of cybercrime and the urgent need to stop it.

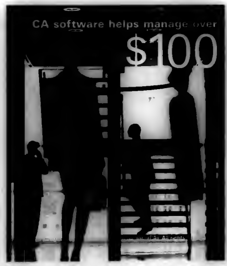
- **It's Alive: The Coming Convergence of Information, Biology and Business,** by Christopher Myer and Stan Davis *(Crown Business, 288 pages, $27.50).* Initially published in 2003, this certainly wasn't the first book to apply concepts from biology and other natural sciences to IT and business, but it remains one of the most readable and provocative. *It's Alive* is a 10-year look into the future toward what the authors call the "molecular economy." The book purports to be a management guide for the business environment created by that new economy, an environment Myer and Davis have dubbed the "adaptive enterprise." But its most interesting passages deal with the science from which it builds its metaphors.

  Two years into the decade the au- were specu- about, some eir observa- ons seem a bit overheated, and the book covers so much ground so quickly that it can trigger giddiness instead of thoughtfulness. But there's certainly enough substance here to lure the reader to check in again in 2013 to see how clear Myer Davis' vision ned out to be.

- **The Silicon Eye,** by George Gilder *(Atlas Books, 318 pages, $27.50).* Gilder's silicon sagas add more than a little extra drama to tales of technologists at work, and his sweeping statements about technology and society are sometimes hard to swallow, but he knows how to spin a yarn.

  The Silicon Eye tells the story of Foveon Inc., a start-up that uses research that blends IT, optics and neurobiology in an effort to build a new kind of digital camera. Among the cast of real-life characters are Michelle Mohowald, the young scientist upon whose ideas the company rests, and Carver Mead, the legendary Caltech electronics guru. Their battle to make a dent in the market dominated by Japanese corporate giants is engrossing and instructive. Find a shady spot and enjoy yourself. 55837

— *Tommy Peterson*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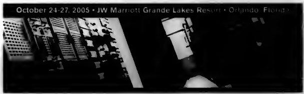

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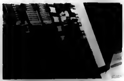

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MONDAY, OCTOBER 24

Registration Open 8:00am - 8:30pm

9:30am – 11:30am	Primer and Tutorial Tracks
11:30am – 1:00pm	Luncheon
12:00pm – 5:00pm	Pre-Conference Golf Outing
1:00pm – 5:00pm	IDC Analyst Briefing
1:00pm – 5:25pm	SNIA Technical Tutorials
4:40pm – 6:30pm	End User Town Hall Meeting
5:00pm – 7:00pm	Speed Dating with IDC: A Channel Partner Networking Event at SNW
7:00pm – 9:00pm	Welcome Reception

TUESDAY, OCTOBER 25

Registration Open 7:00am - 8:00pm

7:00am – 8:00am	Breakfast
8:00am – 12:30pm	General Conference Sessions
12:45pm – 2:00pm	Luncheon
2:10pm – 5:40pm	Concurrent Sessions (IT End-User Case Studies, SNIA Technical Tutorials, Deployable Solutions Tracks)
5:40pm – 8:40pm	Expo with Dinner and Interoperability & Solutions Demo

WEDNESDAY, OCTOBER 26

Registration Open 7:00am - 7:30pm

7:15am – 8:15am	Breakfast
8:30am – 12:15pm	General Conference Sessions
12:15pm – 2:00pm	Expo with Luncheon
12:15pm – 7:15pm	Interoperability & Solutions Demo
2:10pm – 5:40pm	Concurrent Sessions (IT End-User Case Studies, SNIA Technical Tutorials, Deployable Solutions Tracks)
4:00pm – 7:00pm	Expo Open
7:00pm – 9:30pm	Gala Evening with Dinner and Entertainment

THURSDAY, OCTOBER 27

Registration Open 7:30am - 10:30am

7:30am – 8:30am	Breakfast
8:30am – 12:00pm	Concurrent Sessions (IT End-User Case Studies, SNIA Technical Tutorials, Deployable Solutions Tracks)
12:00pm	Conference Concludes

[illegible] of the overall industry ...'

Jeff Pelot
CTO, Denver Health and Medical Center

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7:00pm – 9:00pm	Welcome Reception

TUESDAY, OCTOBER 25

Registration Open 7:00am – 8:00pm

7:00am – 8:00am	Breakfast
8:00am – 12:30pm	General Conference Sessions
12:45pm – 2:00pm	Luncheon
2:10pm – 5:40pm	Concurrent Sessions (IT End-User Case Studies, SNIA Technical Tutorials, Deployable Solutions Tracks)
5:40pm – 8:40pm	Expo with Dinner and Interoperability & Solutions Demo

WEDNESDAY, OCTOBER 26

Registration Open 7:00am – 7:30pm

7:15am – 8:15am	Breakfast
8:30am – 12:15pm	General Conference Sessions
12:15pm – 2:00pm	Expo with Luncheon
12:15pm – 7:15pm	Interoperability & Solutions Demo
2:10pm – 5:40pm	Concurrent Sessions (IT End-User Case Studies, SNIA Technical Tutorials, Deployable Solutions Tracks)
4:00pm – 7:00pm	Expo Open
7:00pm – 9:30pm	Gala Evening with Dinner and Entertainment

THURSDAY, OCTOBER 27

Registration Open 7:30am – 10:30am

7:30am – 8:30am	Breakfast
8:30am – 12:00pm	Concurrent Sessions (IT End-User Case Studies, SNIA Technical Tutorials, Deployable Solutions Tracks)
12:00pm	Conference Concludes

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☐ **I am an IT End-User*** (Complete Attendee Profile below)	☐ **$1,290** General Conference Package (includes General Conference, plus Technical and Business Tracks, SNIA-produced Tutorials, SNIA-Certification "Test-Ready" Courses)	☐ **$1,890** General Conference Package (includes General Conference, plus Technical and Business Tracks, SNIA-produced Tutorials, SNIA-Certification "Test-Ready" Courses)

* IT End-Users are defined as those who are attending Storage Networking World with an intent (and an IT spending budget) to potentially buy/lease hardware/software/services, etc. from our conference sponsors and are not themselves an IT vendor. As such, account representatives, business development personnel, analysts, consultants and anyone else attending who does not have IT purchasing influence within their organization are excluded from the "IT End-User" designation. Interpretation and enforcement of the policy are at the sole discretion of Computerworld.

Attendee Profile: This section MUST be completed by IT End-Users and Channel Partners/Integrators/Consultants only (optional for all other registrations) in order to process your application.

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- ☐ Health/Medical/Dental Services
- ☐ Retailer/Wholesaler/Distributor (non-computer related)
- ☐ Transportation/Utilities
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- ☐ Construction/Architecture/Engineering
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- ☐ Manufacturing of Computers, Communications, Peripheral Equipment or Software

Your Job Title/Function:
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- ☐ Director
- ☐ Manager/Other IT Manager
- ☐ Supervisor

BUSINESS MANAGEMENT
- ☐ CEO, COO, Chairman, President
- ☐ CFO, Controller, Treasurer
- ☐ Executive VP, Senior VP, VP, General Manager
- ☐ Director, Manager
- ☐ Other Corporate/Business Manager

Number of employees in your entire organization (ALL locations)
- ☐ 20,000 or more
- ☐ 10,000 - 19,999
- ☐ 5,000 - 9,999
- ☐ 1,000 - 4,999
- ☐ 500 - 999
- ☐ 100 - 499
- ☐ 50 - 99
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- ☐ $100 Million - $499.9 Million
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- ☐ $1 Million - $9.9 Million
- ☐ $500,000 - $999,999
- ☐ $250,000 - $499,999
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- ☐ Less than $100,000

What is the estimated annual revenue of your entire organization?
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8:30am to 8:40am	**Introduction and Overview** Julia King, Executive Editor, Events, and National Correspondent, Computerworld
8:40am to 9:10am	**Trends in Enterprise Analytics: An Industry Analyst's Overview** Keith Gile, Principal Analyst, Forrester Research
9:10am to 9:40am	**Case Study: The Nature Conservancy** Connor Baker, Director of Business Information, The Nature Conservancy
9:40am to 10:30am	**Transforming Enterprise Data Into Actionable Business Intelligence** Rob Stephens, Director of Technology Strategy, SAS Michael Tillema, Business Intelligence Strategist, Intel
10:30am to 10:45am	Refreshment and Networking Break
10:45am to 11:15am	**Case Study: APEX Management Group** Jody Porrazzo, Ph.D., Director of Econometric Risk Strategy, APEX Management Group
11:15am to Noon	**Panel Discussion – From Gut Feel to Fact-Based Decisions: Real-Life Business, Political and Technology Lessons Learned on the Front Lines of Enterprise Analytics** Moderator: Julia King, Executive Editor, Events, and National Correspondent, Computerworld Panelists: • Connor Baker, Director of Business Information, The Nature Conservancy • Jody Porrazzo, Ph.D., Director of Econometric Risk Strategy, APEX Management Group • Keith Gile, Principal Analyst, Forrester Research • Rob Stephens, Director of Technology Strategy, SAS • Michael Tillema, Business Intelligence Strategist, Intel
Noon	Luncheon (optional)

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Michael Tillema
Business Intelligence Strategist, Intel

Julia King
Executive Editor, Events, and National Correspondent Computerworld

Getting Started on Database Security

Our security manager takes a look at the agency's info assets and realizes the application layer is the weak link. By C.J. Kelly

SECURITY MANAGER'S JOURNAL

"ASSET-CENTRIC security" seems to be becoming a familiar phrase in the security world. However, identifying assets can be complicated. For many organizations, assets are pieces of information stored in numerous places: on local hard drives, on file servers, within databases, in various physical and geographical locations, as well as in transit. The information could include customer or client data, protected health data, proprietary information or financial data, among other things.

Thinking through the layers of security in our environment, I realized that the weakest link in the chain is at the application layer, which is where I see database security fitting in. Much attention has been given to auditing firewall rules, turning off unneeded services on servers and patching operating systems, internetwork operating systems and various applications, such as Internet Explorer. But it seems that not much attention has been given to database security and auditing. I know for a fact that no attention has been paid to it here, and I need to do something about that, though I don't have much experience in the subject.

I'm responsible for numerous databases, including DB2, Access, SQL and MySQL. I've focused on making sure that they reside on the internal network and that the firewall rules are explicit for traffic to and from the Web servers in the DMZ. I've made sure that servers are patched routinely, and I've audited Active Directory users and account permissions, but I've done nothing related to the databases.

Now our agency is developing a major new application using DB2, and I need to come up with security requirements. I have to educate myself on this, but where to begin?

Well, it so happens that Elsevier Digital Press recently sent me the book *Implementing Database Security and Auditing*, by Ron Ben Natan. It has examples for Oracle, SQL, DB2 and Sybase. (I think everyone agrees that using Microsoft Access databases for mission-critical applications is a mistake. Access is used in the agency for small projects that are initiated and managed by individuals who have specific needs for manipulating data downloaded from various mainframes.)

The first step in securing DB2 is to harden the environment. The book provides a to-do list that includes items like these:

- Do not run DB2 as root (or as LocalSystem on Windows).
- Verify that all DB2 files have restrictive permissions.
- Remove default accounts.
- Remove sample databases.
- Check for default passwords and check password strengths.
- Close unnecessary ports and services.
- Remove all permissions granted to "public."
- Restrict sysadmin privileges.

> **I have to educate myself on this, but where to begin?**

So far, so good. Some items, such as the first one, seem obvious, but who knows — maybe the developer/programmer always runs his databases as root. Nothing should be assumed. But I learned some new information that I would not have known if I hadn't been exposed to it by this book. Here are a couple of points for you to keep in mind:

- Never use client authentication. Use DCE_ENCRYPT, SERVER_ENCRYPT or KRB_SERVER_ENCRYPT if possible.
- Revoke privileges on system catalogs like SYSCAT.-COLAUTH, SYSCAT.-DBAUTH, SYSCAT.INDEX-AUTH and SYSCAT.PACKAGE-AUTH.

This is a good list to start with, and I feel like I'll be on solid ground by following it and by making sure the database is at the latest patch level and keeping aware of the security bulletins that pertain to the database. I've e-mailed the to-do list to the consultants who are developing the application for us and are currently managing the database environment on one of our servers. No, I'm not passing the buck, and yes, it's a little late in the game to be doing this, but better late than never.

Besides this to-do list, I got some immediate assistance toward securing the database environment in the first chapter of the book, where the author states that defining an access policy is the "center of your database security and auditing initiative." Aha! That statement pulled me up to the 30,000-foot level as I pondered why the author used this approach. The second chapter is an overview of the usual stuff involved in an in-depth security strategy. At this point, I was hooked. Now that I had some traction, I wouldn't mind reading through a chapter or two on concepts.

Chapter 3 discusses how the database communicates on the network, and it contains a section on SMB/CIFS (Server Message Block/Common Internet File System). I was particularly interested in that because of recent vulnerabilities disclosed regarding the SMB protocol.

So far, I've read the first four chapters (Chapter 4 covers authentication and password security). But flipping ahead, I can see that the book goes deeper and addresses some application coding issues that could be of concern, as well as Web services, stored and external procedures, row-level security, secure replication mechanisms, how to set up an event monitor and trace, encryption, regulations and compliance, and, finally, auditing. One feature of the book that seems particularly valuable is that it outlines the anatomy of various types of attack and describes how to prevent them.

So, with the help of Ron Ben Natan, I'm making a start at securing our databases. The approach in his book works for me, and for the first time I feel like I have some direction in protecting our assets. Since those happen to include protected electronic health information that belongs to the citizens of our state, any guidance I receive will be invaluable. ◆

WHAT DO YOU THINK?

This week's journal is written by a real security manager, "C.J. Kelly," whose name and employer have been disguised for obvious reasons. Contact her at mscjkelly@yahoo.com, or join the discussion in our forum. **QuickLink a1590**

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SECURITY LOG

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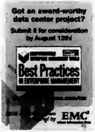

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RATs

DEFINITION

Remote administration Trojans are pieces of malicious software, or malware, that let intruders remotely control computers across a network or through the Internet.

QUICK STUDY

BY JAN MATLIS

THE WORLD of malicious software is often divided into two types: viral and nonviral. Viruses are little bits of code that are buried in other codes. When the "host" codes are executed, the viruses replicate themselves and may attempt to do something destructive. In this, they behave much like biological viruses.

Worms are a kind of computer parasite considered to be part of the viral camp because they replicate and spread from computer to computer.

As with viruses, a worm's malicious act is often the very act of replication; they can overwhelm computer infrastructures by generating massive numbers of e-mails or requests for connections that servers can't handle.

Worms differ from viruses, though, in that they aren't just bits of code that exist in other files. They could be whole files — an entire Excel spreadsheet, for example. They replicate without the need for another program to be run.

Remote administration types are an example of another kind of nonviral malicious software, the Trojan horse, or more simply Trojan. The purpose of these programs isn't replication, but to penetrate and control. Named after the wooden creature that the citizens of ancient Troy were tricked into taking into their fortified city, they are programs that masquerade as one thing when in fact they are something else, usually something destructive.

There are a number of kinds of Trojans, including spybots, which report on the Web sites a computer user visits, and keybots or keyloggers, which record and report the user's keystrokes in order to discover passwords and other confidential information.

RATs attempt to give a remote intruder administrative control of an infected computer. They work as client/server pairs. The server resides on the infected machine, while the client resides elsewhere, across the network, where it's available to a remote intruder.

Using standard TCP/IP or UDP protocols, the client sends instructions to the server. The server does what it's told to do on the infected computer.

Trojans, including RATs, are usually downloaded inadvertently by even the most savvy users. Visiting the wrong Web site or clicking on the wrong hyperlink invites the unwanted Trojan in. RATs install themselves by exploiting weaknesses in standard programs and browsers.

Once they reside on a computer, RATs are hard to detect and remove. For Windows users, simply pressing Ctl-Alt-Delete won't expose RATs, because they operate in the background and don't appear in the task list.

Nefarious Designs

Some especially nefarious RATs have been designed to install themselves in such a way that they're very difficult to remove even after they're discovered.

For example, a variant of the Back Orifice RAT called G_Door installs its server as Kernel32.exe in the Windows system directory, where it's active and locked and controls the registry keys.

The active Kernel32.exe can't be removed, and a reboot won't clear the registry keys. Every time an infected computer starts, Kernel32.exe will be restarted, and the program will be active and locked.

Some RAT servers listen on known or standard ports. Others listen on random ports, telling their clients which port and which IP address to connect to by e-mail.

Even computers that connect to the Internet through Internet service providers, which are often thought to offer better security than static broadband connections, can be susceptible to control from such RAT servers.

The ability of RAT servers to initiate connections can also allow some of them to evade firewalls, which are constructed to look for unsolicited incoming connections. An outgoing connection is usually permitted. Once a server contacts a client, the client and server can communicate, and the server begins following the instructions of the client.

Legitimate tools are used by systems administrators to manage networks for a variety of reasons, such as logging employee usage and downloading program upgrades — functions that are remarkably similar to those of some remote administration Trojans. The distinction between the two can be quite narrow. A remote administration tool used by an intruder becomes a RAT.

In April 2001, an unemployed British systems administrator named Gary McKinnon used a legitimate remote administration tool known as RemotelyAnywhere to gain control of computers on a U.S. Navy network.

By hacking a few unguarded passwords on the target computers and using illegal copies of RemotelyAnywhere, McKinnon was able to break into the Navy's network and use the remote administration tool to steal information and delete files and logs. The fact that McKinnon launched the attack from his girlfriend's e-mail account left him vulnerable to detection.

Some of the famous RATs are variants of Back Orifice; they include Netbus, SubSeven, Bionet and Hack'a'tack. These RATs tend to be families more than single programs. They are morphed by hackers into a vast array of Trojans with similar capabilities. 55488

Matlis is a freelance writer in Newton, Mass. You can reach him at jmtgpcmcm@aol.com.

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Other Nonviral Malware

Adware: Adware, like spyware, are usually installed along with user-selected freeware. They deliver unwanted advertisements.

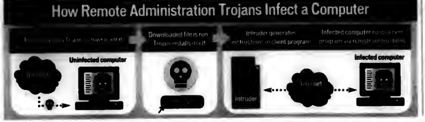
Dialers: Dialers call 900 numbers and run up phone bills.

DDoS zombie agents: These programs allow infected computers to be used in distributed-denial-of-service attacks. The zombie agents are coordinated to request service from the same server.

Keyloggers: Keyloggers log keystrokes and send the information back to clients. Their purpose is often to find passwords and account numbers.

Spybots: Spybots transmit information back to vendors or others interested in surreptitiously tracking a user's activity to learn, for example, which Web sites he has visited.

How Remote Administration Trojans Infect a Computer



Remote access Trojan is downloaded
Downloaded file is run
Trojan installs itself
Intruder generates instructions in client program
Infected computer runs server program via remote instructions
Uninfected computer
Internet
Intruder
Internet
Infected computer

RATs

DEFINITION

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RATs attempt to give a remote intruder administrative control of an infected computer. They work as client/server pairs. The server resides on the infected machine, while the client resides elsewhere, across the network, where it's available to a remote intruder.

Using standard TCP/IP or UDP protocols, the client sends instructions to the server. The server does what it's told to do on the infected computer.

Trojans, including RATs, are usually downloaded inadvertently by even the most savvy users. Visiting the wrong Web site or clicking on the wrong hyperlink invites the unwanted Trojan in. RATs install themselves by exploiting weaknesses in standard programs and browsers.

Once they reside on a computer, RATs are hard to detect and remove. For Windows users, simply pressing Ctl-Alt-Delete won't expose RATs, because they operate in the background and don't appear in the task list.

Nefarious Designs

Some especially nefarious RATs have been designed to install themselves in such a way that they're very difficult to remove even after they're discovered.

For example, a variant of the Back Orifice RAT called G_Door installs its server as Kernel32.exe in the Windows system directory, where it's active and locked and controls the registry keys.

The active Kernel32.exe can't be removed, and a reboot won't clear the registry keys. Every time an infected computer starts, Kernel32.exe will be restarted, and the program will be active and locked.

Some RAT servers listen on known or standard ports. Others listen on random ports, telling their clients which port and which IP address to connect to by e-mail.

Even computers that connect to the Internet through Internet service providers, which are often thought to offer better security than static broadband connections, can be susceptible to control from such RAT servers.

The ability of RAT servers to initiate connections can also allow some of them to evade firewalls, which are constructed to look for unsolicited incoming connections. An outgoing connection is usually permitted. Once a server contacts a client, the client and server can communicate, and the server begins following the instructions of the client.

Legitimate tools are used by systems administrators to manage networks for a variety of reasons, such as logging employee usage and downloading program upgrades — functions that are remarkably similar to those of some remote administration Trojans. The distinction between the two can be quite narrow. A remote administration tool used by an intruder becomes a RAT.

In April 2001, an unemployed British systems administrator named Gary McKinnon used a legitimate remote administration tool known as RemotelyAnywhere to gain control of computers on a U.S. Navy network.

By hacking a few unguarded passwords on the target computers and using illegal copies of RemotelyAnywhere, McKinnon was able to break into the Navy's network and use the remote administration tool to steal information and delete files and logs. The fact that McKinnon launched the attack from his girlfriend's e-mail account left him vulnerable to detection.

Some of the famous RATs are variants of Back Orifice; they include Netbus, SubSeven, Bionet and Hack'a'tack. These RATs tend to be families more than single programs. They are morphed by hackers into a vast array of Trojans with similar capabilities. 55488

Matlis is a freelance writer in Newton, Mass. You can reach him at jmtgpcmcm@aol.com.

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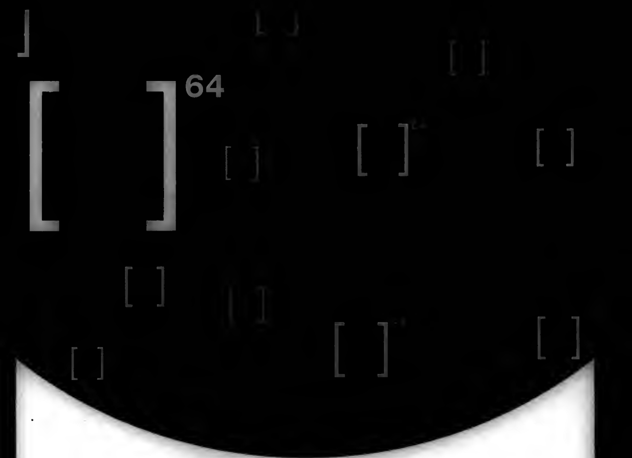
How Remote Administration Trojans Infect a Computer

Uninfected computer
Infected computer



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BRIEFS

Stellent Upgrades Web Content Tools

■ Stellent Inc. has released Version 7.5 of Stellent Site Studio. The Web content management software now offers automated Web site migration capabilities, according to the Eden Prairie, Minn.-based vendor. Also included is a new tool that's designed to let users quickly compare current and previous versions of a site. Available now, Site Studio is priced between $25,000 and $100,000. It's included with the Stellent Web Content Management suite, which is sold as an option to Stellent Content Server.

Mercury Partners With Peregrine

■ Mercury Interactive Corp. and Peregrine Systems Inc. have announced a partnership in which Mountain View, Calif.-based Mercury will integrate its application management tools with San Diego-based Peregrine's asset and service management software. When the integrated system begins shipping later this year, customers will be able to use Mercury IT Governance Center with Mercury Application Mapping and Peregrine Service-Center to prioritize and manage IT change requests, conduct business-impact analysis and automate deployment of changes, according to the companies. Pricing isn't yet available.

WebMethods Offers Compliance Tool

■ WebMethods Inc. has introduced webMethods for Compliance. The software system helps users continuously and automatically verify the completeness, accuracy and validity of transactions and business processes in accordance with regulatory requirements, according to Fairfax, Va.-based webMethods. Pricing for the system, which is compatible with Oracle and SQL Server databases, ranges from $300,000 to more than $1 million.

MARK WILLOUGHBY

Coder Be Agile, Coder Be Quick

A NEW FORCE is making itself felt in the world of software development. Advocates of the agile development methodology (*www.agilealliance.com*) claim that its potential to increase productivity in some areas is so bright that coders are going to need to wear shades to write software with it.

Instead of starting by developing a detailed set of requirements, agile methodologies call for programmers to begin by writing small chunks of functionality that can be completed in two to four weeks — "iterations," in agilespeak. Module testing receives the same level of attention as the actual writing of the code. When one iteration is done, developers find the next requirement to add more functionality to the module just completed and thereby start a new iteration.

Agile processes promise to deliver high-quality, functioning software at a fraction of the time and cost of traditional methods. Still, agile isn't likely to replace the so-called waterfall development methodologies, those proven ivory towers that have been used for the development of everything from missile guidance to widget-tracking ERP systems. For many projects, especially big ones with relatively fixed requirements, the Software Engineering Institute and its family of Capability Maturity Models (*www.sei.cmu.edu/cmmi*) are the gold standard and will remain so.

What's changed is product development in the era of global mass customization. You can't afford a three-month requirements-definition phase whose pieces are nebulous and evolving. The agile method has at its core the ascendance of trial and error over planning and documentation or, borrowing more agilespeak, "early value delivery" over "formalism."

Agile tilts to a more intuitive but still disciplined form of software development. Build and test a software module for that widget-tracking system with a very small, tightly integrated team. Then interpret the requirements for that module in the testing and have the software built before the requirements even would have been developed using traditional waterfall methods.

Agile already is showing up in mainstream software development. Some developers will see it first as part of a hybrid methodology, with some parts managed via waterfall methods and others spun off to agile. Likely candidates for spinning off to an agile team are software modules that include undefined areas or functionality that's likely to change.

Instead of waiting for dependencies to be resolved or customer inputs to catch up to requirements, put agile to work. Develop the test plan, build, and test with "Tinkertoy" interfaces that can be easily updated when the project catches up. Agile excels in this environment.

The potential savings offered by the agile method force the global software development marketplace to take it seriously. Its pros and cons are hotly debated. If agile does what its proponents claim, it will be disruptive technology for software development, changing everything.

And if everything changes, there will be winners and losers. The winners will include a lot of those early proponents who were able to see and embrace the change — and who didn't have a large stake in the entrenched way of doing things. The losers will mostly be development shops that have a large stake in the ancient regime and are unable or unwilling to embrace the change.

Squarely in the sights of some agile proponents is the movement to offshore development. Examined through an agile lens, those billions of dollars spent in developing software offshore are suspect. Is it better to write a great set of requirements and enforce an elegant project management system to gain the economic benefit of cheap offshore development? Or should we begin defining an agile iteration in parallel with a test plan and begin writing software close to home for early delivery of a functioning solution?

Offshore development puts considerable stress on some of the cultural practices fundamental to agile, such as small teams working in close proximity, instant communication and tightly integrated testing. Disruptive technology changes the rules in Bangalore, Boston, Beijing and Berlin. Being close to the agile project— "visibility," in agilespeak — puts a premium on proximity and new types of project management tools.

But it would be a mistake to assume that agile brings a sustainable advantage to onshore developers in the U.S. Once the offshore community gets on board with agile — and they are starting to do so — they will adopt new management tools and methods and continue to enjoy the same cost advantages they do now, albeit at a faster pace. 55661

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MANAGEMENT

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Farewell to Fiefdoms
The Southern Co. was ahead of its time when it pioneered an IT shared-services concept 10 years ago. Today, it's reaping the benefits on the bottom line and in the career paths of its CIOs. **Page 42**

ADVICE
Managers' Forum
Check out the debut of Paul Glen's advice column, in which he answers readers' questions about the art and craft of management. One reader asks how to manage a CIO with a bad case of "rock-star-itis." **Page 44**

Career Watch
IT hiring activity is expected to be brighter in the third quarter because of business expansion, especially among large companies and in New England, according to a new report from Robert Half Technology. **Page 46**

THE 100-Year Archive DILEMMA

As more organizations store more data longer, the IT industry seeks a better way. **BY LUCAS MEARIAN**

A record is a record, whether it's a sheet of paper, an e-mail, an electronic document or a digital image.

"It's the content that drives retention, not the media it's written on," says Adam Jansen, a digital archivist for the state of Washington. And recent federal regulations are requiring more companies to save more content for longer periods of time.

While content may be king in theory, in practice, the media on which it's stored and the software that stores it present problems. As digital tapes and optical discs pile higher and higher in the cavernous rooms of off-site archive providers, businesses are finding them increasingly expensive to maintain.

The software that created the data has limited backward compatibility, so newer versions of a program may not be able to read data stored under older versions.

Moreover, the media on

◀ **ADAM JANSEN**, digital archivist for the state of Washington, explains, "It's the content that drives retention, not the media it's written on."

CRAIG SWEAT

which the data is stored degrade relatively quickly. "Ten years is pushing it as far as media permanence goes," says Jansen.

Varied Approaches

Today, the only safe path to long-term archiving is repeated data migration from one medium and application to another throughout the data's life span, experts say.

But the storage industry is working on the problems from various angles.

One solution to the backward-compatibility problem is to convert data to common plain-text formats, such as ASCII or Unicode, which support all characters across all platforms, languages and programs. Using plain-text formats to store data enables virtually any software to read the files, but it can cause the loss of data structure and rich features such as graphics.

Another approach is to use PDF files to store long-term data. There can be backward-compatibility problems with PDFs, but the file format's developer, Adobe Systems Inc., has created an archival version of its software, called PDF/A, that addresses them.

To date, the most promising standard data-storage technologies are emerging in new XML-based formats, according to analysts and studies. XML is a file format and self-describing markup language that is independent of hardware and operating systems.

- Categorize your data according to its importance.
- Create polices about which data to retain and how long to retain it.
- Establish a migration path for your data. Don't upgrade willy-nilly.
- Don't retain data longer than you must.
- Create strong vendor partnerships to defer costs and establish trust.

On the media side, the Storage Networking Industry Association (SNIA) is working toward solving what it calls the "100-year archive dilemma" through a standards effort for media. The goal is to store data in a format that will always be readable by a generic reader.

"Degrading media is not at all the issue. Rather, the real issue is long-term readers and compatibility — the logical problem which we intend to address," says Michael Peterson, president of Strategic Research Corp. in Santa Barbara, Calif., and program director for the SNIA Data Management Forum.

Some businesses are postponing the long-term archival problem with large farms of disk arrays, which keep data online and accessible. Jim Damoulakis, chief technology officer at Framingham, Mass.-based consultancy Glass House Technologies Inc., suggests that companies look into using an emerging class of inexpensive disk arrays as a storage medium. "At least you know the data is there and readable," he says. "A tape or optical media sitting in a vault can degrade."

The new disk arrays, sometimes called disk libraries, are based on relatively inexpensive ATA disks, formerly used only in PCs.

Peterson says that this is a temporary solution, however. "Long term, I am not sure that current disk interfaces won't have the same migration problem [as tape]," he says. "Whether it is tape or disk, you are going to have to migrate."

Managing Metadata

Meanwhile, users struggle on. Last October, for example, Jansen and his IT team completed a three-year project to create an open-systems-based archive management center for the state of Washington that will house records from 3,300 state and local agencies in perpetuity.

The center, in Cheney, Wash., currently stores 5TB of data and is expected to grow to 25TB by the end of the year. It cost about $1.5 million for management software and hardware, including servers, a storage area network and tape drives. Washington spent $1 million more on a joint development project with Microsoft Corp., which is helping the state create what it hopes will become an open format.

"We want to avoid proprietary file formats to the extent it's possible," Jansen says.

He says that the most important part of any long-term archival system is centralizing the backup of data in order to be able to standardize the storage method. At the heart of the state's archival system is the storage of metadata, the information that describes the data.

When documents are transmitted over the WAN to a central data center, information such as who created the document, what type of document it is, where it was created, when it was created and why is was created is captured and stored in a SQL database. That way, "20 years from now, you don't have to know that particular document, but you can perform a search based on the record type," Jansen says.

The state's system also notes which computer originated the data. "We capture the actual IP address, CPU type and Ethernet adapter. We get the digital fingerprint of that computer," says Jansen. This helps to prove the authenticity of data. In addition, the state issues a digital certificate for any document using the MD5 hashing algorithm to verify the authenticity of that data.

Most data is kept in a standard format: Word documents are turned into PDF files, and images are converted into TIFF files.

Jansen says he is considering using Microsoft's Office 12 and its new XML-based file format as a standard archiving format in the future.

And virtually everyone hopes that standard — or another one — will stick. Peterson sums up the 100-year dilemma this way: "There aren't what we'd call standards for long-term archiving — only best practices." 55446

BEFORE YOU ARCHIVE

AS ORGANIZATIONS struggle with the physical problems associated with archiving, many are also addressing the theoretical underpinnings. They are beefing up their policies around how they classify and store data, partly in response to regulations such as the Sarbanes-Oxley Act and the Health Insurance Portability and Accountability Act.

"Unquestionably, the foundation of any archiving system is strong records management skills," says Adam Jansen, a digital archivist for the state of Washington.

And while the development of products and standards will help companies as they deal with backward compatibility of software and degradation of media, records management is something they can begin to tackle today.

Any archival scheme should start with creating an audit trail to ensure the authenticity of the data, says Jim Damoulakis, CTO at GlassHouse Technologies. The plan should also include categorizing data according to its importance, which can dramatically affect the cost of the systems. "Without an archiving strategy in place – and that's common today – your entire storage infrastructure will be eaten up over time with legacy data," he says. "Going through the exercise of doing some level of data identification and classification is a critical first step."

Mario Carlos, head of IT at Manila Electric Co. in the Philippines, says he began to formulate a long-term preservation plan by prioritizing his data. His priorities are based on regulatory requirements, economic feasibility, operational ease, obsolescence, available technology and the difficulty of changing current operations.

To assist in records management, information classification management software and appliances have been emerging over the past year from vendors such as Kazeon Systems Inc., StoredIQ Inc., Arkivio Inc., Index Engines Inc. and Scentric Inc.

The technology scans unstructured file data and applies lexicons of keywords to identify likely target documents. For example, the engines can be set to identify data related to compliance with Securities and Exchange Commission regulations or HIPAA, or to earmark data for legal discovery.

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JIM DAMOULAKIS
CTO, GLASSHOUSE TECHNOLOGIES INC.

– Lucas Mearian

YOU THINK YOU NEED STORAGE?

The National Archives is planning a system to store every White House e-mail, starting with those created during President Clinton's second term.

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> JIM DAMOULAKIS

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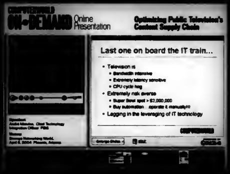
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Farewell TO Fiefdoms

Moving to shared IT services has boosted The Southern Co.'s bottom line – and the careers of its divisional CIOs. By Thomas Hoffman

IN THE 24 YEARS that Bart Wood has worked at The Southern Co., he's done everything from cost accounting to managing power delivery. But Wood's background in customer service has served him particularly well over the past eight years as CIO at Georgia Power, one of seven operating companies for Southern, a super-regional energy provider based in Atlanta.

That's because Wood, like other divisional CIOs at Southern, is responsible not only for overseeing IT activities at Georgia Power but also for managing customer service, marketing and human resources systems operations for all of Southern.

Similarly, Aline Ward, a 21-year company veteran, is not only CIO at Southern's Mississippi Power operating company but is also responsible for the entire company's transmission and distribution systems.

Wood and Ward personify Southern's IT shared-services organization, which the company pioneered in the mid-1990s. "We were way ahead of our time," says Ward. "There was no one else doing anything like this 10 years ago, so there was no one to model ourselves after."

The shared-services effort was spearheaded by then-CIO Tom Fanning, who is now Southern's chief financial officer. Fanning wanted to create synergies among operating units and reduce costs by providing common desktop support, application maintenance and other IT services to Southern's operating companies.

Prior to the formation of the IT shared-services organization, known as Southern Company Services, there was a lot of redundancy even within single divisions. Individual operating companies often used several systems — three or four accounting systems, for example — for the same purpose. There was also little commonality among operating systems or e-mail platforms used by each entity.

This buildup of redundant systems was the result of "little fiefdoms" that had cropped up in each of the operating companies, Ward explains.

'Throwing Jell-O'

It wasn't easy to convince all of Southern's far-flung IT workers to buy into the notion of a shared-services IT organization.

"There were some folks [in IT] who didn't want to be centralized. It was like throwing Jell-O on the wall and hoping it would stick," says Becky Blalock, who has been Southern's senior vice president and CIO for the past three years.

Blalock worked outside of IT during the first 18 years of her career before becoming CIO at Georgia Power in 1995, and that helped her drive the centralization effort, at least within her business unit. "Being an outsider to IT was almost an advantage to me, since I didn't have any emotional attachments," she says.

Fanning's charisma and his vision for IT helped smooth the transition to a shared-services environment; the fact that divisional CIOs picked up functional responsibilities also helped, Ward says. Before then, "we [in IT] were all essentially order takers, and Tom Fanning wouldn't stand for that," she recalls.

Another step that eased the transition was the creation of technology leadership teams for each functional area. For example, Ward meets monthly with nine business and IT delegates from different operating companies to discuss transmission and distribution issues, such as technologies that could help make Southern's transmission grid more reliable. They also monitor and update the company's progress toward meeting goals in a five-year master plan for each functional area. And the group frequently evaluates upgrades and replacements to core systems such as job estimating and tracking systems, Ward adds.

It's all part of a strategy aimed at helping Southern run as efficiently as possible, with each operating unit responsible for its own profits and losses. "We have to be successful as operating companies, but we also have to be successful as Southern Co.," says Ward.

The division of functional responsibilities among the CIOs "seems rather unique to Southern," says Rick Nicholson, an analyst at Energy Insights, a unit of market research firm IDC.

And because Southern is trying to centralize those activities, "it makes sense to have one person responsible for each area," says Zarko Sumic, an analyst at Gartner Inc.

Pioneers and Mavericks

Southern is used to taking pioneering approaches to IT and business. It was one of the first companies to create roles for business analysts as liaisons between IT and the business units, says Ward. And when the dot-com boom and explosive economic expansion in the U.S. were leading many organizations to put more IT responsibilities in the hands of business managers, the energy giant began centralizing its IT operations.

Southern's maverick approach seems to be working across the board. The systems consolidation and centralization effort has helped the company slash both its budget and head count. And according to Blalock, the shared-services group received its highest-ever customer satisfaction ratings in 2004. "We are definitely doing more with less and doing it very well," she says.

Having functional responsibilities also provides terrific career opportunities for divisional CIOs like Wood, since they are able to develop critical IT and business management skills that can eventually be applied to other parts of Southern's operations.

"If you asked me what my next job would be, it would probably be as head of customer service for an operating company," Wood says.

That kind of career path is plausible for business-savvy CIOs like Wood, says Nicholson, "because they're very versed in that business process and its reliance upon IT." © 55480

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[MANAGERS' FORUM]

My goal [illegible] vide an [illegible] nity for [illegible] cussion on the [illegible] and craft of management. I'll do my best to answer your questions, and then [illegible] for your responses [illegible]

I have more than eight years of experience in IT and am pursuing my MBA in management technology. Although I've earned several certificates for computer training courses throughout the years, I have no Microsoft certifications. After earning my MBA, will I need to have some certifications under my belt if I want to gain a management position in IT? It sounds like you have committed yourself to a career of learning, and not only is that admirable, it's necessary to grow and advance — congratulations! You're at a major crossroad in your career, and it's time to make some hard decisions.

Early careers are driven by increasing your depth and breadth of technical knowledge. One very popular way to demonstrate continued technical growth is with certifications. As you learn, you are able to deliver more value to your employers and should be recognized, compensated and promoted for the increased value.

But at some point, you have to decide how you are going to continue to add more value to your organization. On the path of technical value, you become ever more specialized and narrowly focused on your technical knowledge. You deliver more value through the depth of your knowledge. On the path of managerial value, you add more value by making others more productive.

If you are committed to going the managerial path, forget about the MCSE. It will do nothing for you or your employers, since the technical value you can add will diminish rapidly.

If you want to continue to be primarily technical, get the MCSE. Slow down on the MBA but don't quit it altogether, because deeply technical people with good business knowledge are even more valuable than those who have none.

While it may seem attractive to try to go both ways, it's not possible for any but the most amazingly energetic and talented people. The technical people who can manage brilliantly are the alien abductees of the IT world. There are far fewer people who can do this than there are people who think that they can.

The staffers don't want to take the time to fill out time reports on what projects they are working on, their supervisors don't care enough to enforce it, and management won't do anything but "remind them." What can I do? If the staff doesn't care about it, the supervisors don't care about it, and the executives pay only lip service to these reports, they probably aren't really important. If you are trying to collect data that no one uses, it's hopeless. Don't bother.

Just get rid of the rule. Having unenforced and widely disregarded rules can breed an attitude of contempt for all the rules. In IT departments, for every rule imposed, management pays a price in flexibility, morale and respect. Pick your rules carefully, and then enforce them appropriately.

If you want people to track their time closely, they need a good reason to do so. Let the staffers estimate their own work, and use the time tracking to test the accuracy of their estimates. That will help them learn how to improve their estimation skills, so they may put up with it.

If you want the supervisors to insist on time tracking, they should be evaluated not on enforcing the rule, but on using the information to bring their projects in on time.

How do I guide my CIO to stay focused on the work of the company rather than spend large percentages of his time public speaking and applying for awards? I'm afraid that the CIO may be getting "rock-star-itis." I know the teams need recognition beyond the company, but what's the right balance? If your CIO is more interested in building his public profile than in running the IT function, you've got a real problem. In my book *Leading Geeks*, I suggest that an IT leader has four key responsibilities:

- Furnishing internal facilitation.
- Providing external representation.
- Nurturing motivation.
- Managing ambiguity.

If a CIO is focusing on any one of these to the exclusion of others, the organization suffers. The CIO is shirking important parts of his responsibilities and needs to either change his approach or be replaced.

Being an active member of the IT management community is an admirable and valuable thing for a CIO. A speech here or there, a magazine interview or two, or even serving on the board of a professional association is a good thing to do. But it doesn't take that big a time commitment. And while the PR generated by CIO awards isn't a bad thing for any company or the morale of the IT staff, it does rather little to keep the systems running.

Rock-star behavior is personal glory-seeking, not effective representation of the IT group. That stance is easily spotted by the staff and is appropriately met with derision and disgust.

There are no rock stars in the IT world. We do things that are absolutely essential but hardly glamorous. If someone is just résumé-padding, he needs a good kick in the rump roast.

Q 54660

WHILE WE'RE ON THE SUBJECT . . .

Ability to think strategically
Ability to think analytically
Leadership skills
Oral communication skills
Quantitative skills

Leadership
Ability to make decisions with imperfect information
Interpersonal skills
Initiative/risk-taking ability
Written communication skills

SOURCE: GRADUATE MANAGEMENT ADMISSION COUNCIL 2005 SURVEY OF 1,691 RECRUITERS

More for the Outgoing CIO

IF YOU'RE A CIO WHO ENJOYS being in the public eye, one of Gartner Inc.'s CIO must-do resolutions for 2005 may be just the ticket. Notch up your external public relations activities, Gartner advises, but first get professional advice.

That means moving beyond the occasional conference presentation to learn how to deal with a tougher audience: the press. But the payoff is the ability to bring flattering attention not only to yourself, but also to your IT group and your company. "Compared with their business peers, CIOs are often ill-prepared to deal with the press, resulting in ineffectual or counterproductive public statements," Gartner says. "Opportunities exist to gain competitive advantage from PR, but you should professionalize your competence."

Get professional PR [illegible] yourself and your team.

Offer your views about how change in your industry are catalyzed by technology.

Resist the temptation to comment about the future of a technology that your company neither makes nor sells.

Seize your share of the PR payback when an IT project facilitates product or service innovation that's visible to customers.

[MANAGERS' FORUM]

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54880

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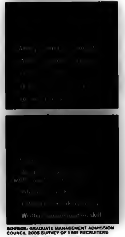

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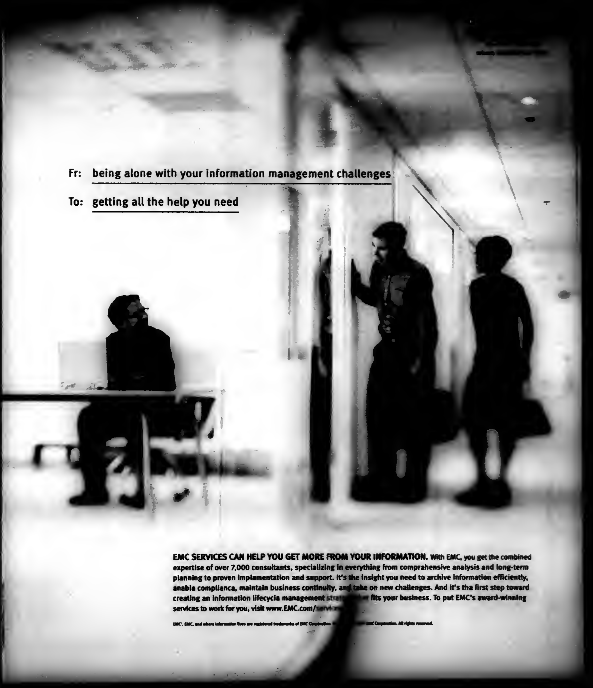
Fr: being alone with your information management challenges
To: getting all the help you need

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Career Watch

THE [illegible] WORKPLACE

Half of the Fortune 500 companies have dealt with at least one incident related to computer pornography in the workplace over the past 12 months, according to a survey released last month.

Corporations are taking the problem seriously; survey respondents said that those responsible were fired in 44% of the cases and disciplined in 41%.

The survey was conducted by Delta Consulting, an Atlanta-based market research company. The respondents were executives from 50 of the Fortune 500 in industries, including manufacturing, retail, health care, banking/financial services and telecommunications. The individuals polled ranged from senior vice presidents to managers.

Of those polled, 74% said they were fully aware that computer porn in the workplace can form the basis for employee claims of sexual harassment and a hostile work environment However, only 54% described themselves as being totally cognizant that attorneys looking for evidence in such cases will first want to see a company's records on Internet usage, e-mail traffic and images on hard drives.

"At the root of the issue, companies are liable – it's their equipment and their employees," said Alain Recaborde, principal of Delta Consulting. "Not all of them realize that."

Recaborde split the people polled into three groups. Twenty-five percent, particularly those at the senior executive level, were very sensitive to the topic of computer porn at work and the legal issues surrounding it. But on the flip side, another 25% didn't seem to be aware of the issue or concerned about it. "Then, there's 50% in the middle who could go either way," Recaborde said.

– China Martens, IDG News Service

Q&A

[illegible] Staff[illegible] from [illegible] War[illegible] England [illegible] It might just have been a blip, but April was a banner month for job creation. According to the Bureau of Labor Statistics, the U.S. economy added 274 000 jobs in April — roughly 100 000 more than analysts had expected.

The gains also reflect an uptick in the hiring of temporary IT workers, according to Yoh, a staffing and outsourcing services firm with more than 80 locations in the U.S. and U.K. *Computerworld*'s Thomas Hoffman spoke with Yoh's Charlie Jones about hiring trends for temporary IT workers.

What were you able to glean from the April jobs report in terms of hiring prospects for temporary IT workers? I think you're going to start seeing an upward spiral. Everything that we've been seeing indicates that there's increased demand for IT professionals across all regions and within different parts of companies We've been seeing a fairly substantial increase in demand for project managers, application developers – especially in [enterprise application integration] technologies There's a big increase in demand for Java-type skills, a nice blip in the ERP/CRM world and also in the data warehousing space.

In the last couple of years, IT budgets were slashed and new project developments were put on the back burner. Now, some of those monies have been freed up, and organizations are looking at what types of projects are going to drive ROI, and that's where we're seeing the greatest increase in activity

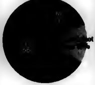
Are there particular industries where hiring for temporary IT workers is strongest? A lot of work is becoming available in banking and finance There are some nice increases in pharmaceuticals. We've seen a substantial blip in the retail sector

How is this affecting wages? Over the last few years, wages had been compressed. Now, hourly wages are going up for contract consultants, with a lot of higher-end professionals getting multiple offers. We're seeing more and more counteroffers and an increase in the bill rates that we're sending back to our clients. It's even starting to outstrip supply, which will cause labor rates to increase.

Is there any way to quantify the increase in wages over the past three to six months? I haven't put the pen to paper on this yet, but it looks like it's a 5% to 6% increase since the beginning of the year. **55314**

Time to Get Away

Do employees in your organization feel more comfortable taking time off this year?



SOURCE: WORKFORCE MANAGEMENT MAGAZINE ONLINE POLL, JULY 2005 457 RESPONDENTS

[illegible] BRIGHT NEWS

Jobs Front

IT [illegible] to increase [illegible] quarter. According to the "Robert Half Technology Information Technology Hiring Index and Skills Report," 14% of more than 1,400 CIOs interviewed said they plan to add [illegible] quarter, while 3% [illegible] [illegible] and 83% [illegible] current staff levels. The numbers translate to a net 11% hiring increase, compared with a net 6% increase forecast a year earlier. That's the largest net increase in hiring activity in 12 quarters, the report said.

What's driving the IT hiring? Business expansion was cited by 69% of respondents as the leading factor, followed by demand for increased customer and end-user support, at 27%.

Executives at the largest firms (1,000 or more employees) forecast the highest levels of IT hiring activity, and CIOs in New England were the most optimistic about future hiring.

Contacted by an independent research firm, the national poll includes responses from CIOs from a stratified random sample of U.S. companies with 100 or more employees.

Compiled by Jamie Eckle.

WHAT'S IN DEMAND

Windows administration	**77%**
Wireless network management	**48%**
SQL Server management	**47%**
Cisco network administration	**43%**
Check Point firewall administration	**29%**
Visual Basic development	**27%**
Active Server Page development	**23%**
.Net development	**21%**
XML development	**21%**
Linux administration	**18%**
Oracle database management	**18%**

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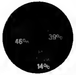
QUICK HITS

Open-Source

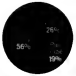
What are your plans for open-source software?

2004



Base: 140 North American companies
Percentages don't equal 100 because of rounding

2005

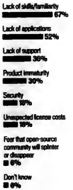


Base: 128 North American companies
Percentages don't equal 100 because of rounding

SOURCE: FORRESTER RESEARCH INC., CAMBRIDGE, MASS., JUNE 2005

* * *

If you're not using or planning to use open-source, why not?



Base: 33 North American companies not using or planning to use open-source software. Multiple responses allowed.

SOURCE: FORRESTER RESEARCH INC., CAMBRIDGE, MASS., JUNE 2005

STEFAN STEURS

Offshoring: A View From Europe

I'M A READER OF *Computerworld* on the other side of the Atlantic. When I read "The 'O' Word Reconsidered" [QuickLink 54064], I was glad to see that someone in the U.S. was treating this subject from a different point of view than the one I've been hearing and reading lately.

The stance on outsourcing taken by some U.S. citizens in articles, columns and e-mails is sometimes grim. At some point, it often starts to sound very arrogant, not to say racist. Here are the arguments, as I see them:

Americans frequently question the quality of "offshore" education. But there are good universities all over the world teaching students in English about IT so they can become well-educated software developers. Education is the way forward to democracy and prosperity, so shouldn't we be happy that those people can get it? Democracy and prosperity are what we're all after, aren't they?

Moreover, the power of numbers can't be denied. The "offshore" workforce accounts for one-third of the world's population. And improving education systems and emerging modern infrastructures will generate more pools and pockets of talent, whether we like it or not.

What's more, the quality of the software that we in the West have been building has often been criticized, too. Are we in a position to pass blame to other people about lack of quality when we haven't been doing such a great job ourselves?

Wages are another point of contention. A lot of people in the "offshore" countries are very motivated and work for far less than their European and American colleagues. For people with fewer opportunities, lower wages are better than no wages at all.

True, Americans and Europeans sometimes lose jobs to these people, but aren't we over-represented in terms of the proportion of the world's IT workers to our relative populations? Can it be called fair that we deny people of the largest countries in the world a fair share of the market?

The Asian market is developing quickly. It represents a giant opportunity, and protectionism won't buy a lot of goodwill.

Involvement, on the other hand, will lead to mutual benefits. Don't forget that when these local economies get going, they'll become markets for the products and services you'll be offering tomorrow.

We've seen other sectors going through the same motions. Producers of goods like clothing and electronics have mostly abandoned the U.S. and Western Europe in favor of places with cheap labor, relaxed ecological rules and low-priced raw materials. This has not always happened in a very fair way, and sometimes it has looked like exploitation.

Fortunately, IT requires educated and skilled people, a decent infrastructure and appropriate working conditions. Even our IT equipment's need for clean and climate-controlled operating conditions makes the playing field more level.

I can appreciate that IT workers feel threatened, but fear is a bad factor in decision-making. A better reaction is to make sure that you can be competitive. If you are good at what you do, then strive to get even better — work harder, be flexible and enhance your knowledge and skills.

IT has made this world smaller and more connected, and the outsourcing/offshoring of software development can help create the global village we say we're seeking. In this village, we will all be neighbors, and good neighbors are what we need. Such a village requires mutual respect, involvement and cooperation, not isolation and fortresses.

The idea of a level playing field may not be appealing to the politicians who seek to protect power and influence or to the big corporations that, above all, want to maximize profits and lower production costs. It may not seem appealing to people who might lose their jobs. Nevertheless, not accepting fair and equal opportunities for all the people who live in this village can't be the way to go.

Advances will be in the interest of the whole world, not limited to a lucky few. If you don't get involved in globalization, if you don't develop your relationships, then chances are you will be overtaken and left behind. **55190**

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I can appreciate that IT workers feel threatened, but fear is a bad factor in decision-making. A better reaction is to make sure that you can be competitive. If you are good at what you do, then strive to get even better — work harder, be flexible and enhance your knowledge and skills.

IT has made this world smaller and more connected, and the outsourcing/offshoring of software development can help create the global village we say we're seeking. In this village, we will all be neighbors, and good neighbors are what we need. Such a village requires mutual respect, involvement and cooperation, not isolation and fortresses.

The idea of a level playing field may not be appealing to the politicians who seek to protect power and influence or to the big corporations that, above all, want to maximize profits and lower production costs. It may not seem appealing to people who might lose their jobs. Nevertheless, not accepting fair and equal opportunities for all the people who live in this village can't be the way to go.

Advances will be in the interest of the whole world, not limited to a lucky few. If you don't get involved in globalization, if you don't develop your relationships, then chances are you will be overtaken and left behind. 55190

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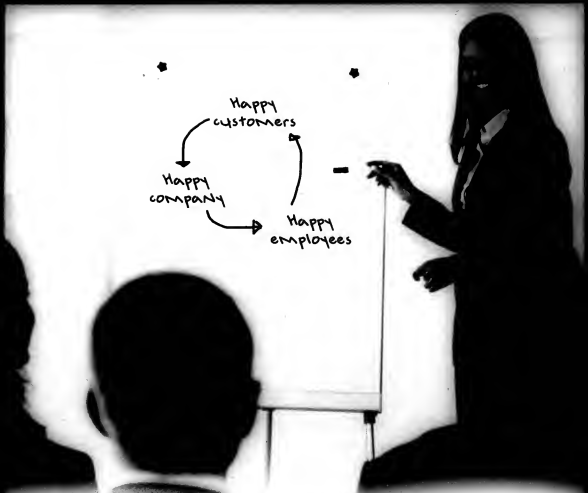

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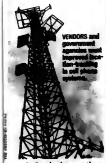
Mass. Set to Restart 911 Rollout After Tragedy

BY MARC L. SONGINI

THE state of Massachusetts is preparing to restart Verizon Communications Inc.'s $75 million implementation of an updated 911 emergency system after a software glitch was linked to a delayed emergency response that ultimately ended in tragedy.

The rollout to public safety operations statewide was halted after the May 19 incident, when a 911 call in Hopkinton failed to display the caller's address or telephone number for emergency personnel. That feature was a key part of the system.



VENDORS and government agencies want improved location-tracking in cell phone systems.

THE ASSOCIATED PRESS

By the time Hopkinton police and fire personnel located the caller's house, the person requesting help was "unresponsive" and subsequently died, according to a statement by Thomas Irvin, Hopkinton's police chief.

The 911 system in question, called Vesta, was made by call center gear provider Plant Equipment Inc. in Temecula, Calif. The vendor referred all questions to Verizon, which was contracted by Massachusetts to install the system.

The state is installing the new system largely to take advantage of its ability to display the location of cell phone callers. In this case, though, the 911 call was made from a land line.

The glitch led Verizon and the Massachusetts Statewide Emergency Telecommunications Board (SETB) to stop deploying the systems until the problem was fixed, a Verizon spokesman said.

Prior to the troubled May 19 call, the system had been installed in 14 so-called public-safety answering points in Massachusetts. All 14 systems, which have remained online, were expected to have received the software modification by July 22, according to the spokesman.

Paul Fahey, executive director of the SETB, said the agency will meet early next month to decide whether to resume the work of installing the rest of the 260 Vesta systems.

According to an e-mail statement from Irvin, Hopkinton has resumed using the new system under a close watch by officials. The installed systems were fixed as part of a maintenance agreement with Verizon.

The Verizon spokesman said the updated 911 system includes a redundancy feature that enables users to retrieve information by other means if it's not immediately displayed on their terminals.

However, the spokesman said, "we do not know if the information for this particular call appeared on the backup systems. We don't have any diagnostic data from that call."

Irvin said he believes the redundant feature, if it was in place, was unavailable to users until after the fix was released.

The Verizon spokesman claimed that the glitch affected less than 1% of 911 calls placed through the Vesta systems installed in Massachusetts. 55714

MIAMI 911

Florida's Miami-Dade County is set to roll out a new 911 system that promises closer links to other county applications:

QuickLink 55735
www.computerworld.com

Continued from page 1

IT Wages

but they didn't all agree that increasing costs for offshore IT labor are a significant contributing factor.

"I don't feel that increases of offshore salaries are the driver; it's more driven by local economies improving and fewer available resources," said Denny Brown, CIO at Arizona Public Service Co. in Phoenix. After having frozen IT salaries for the past two years, the utility company is considering a moderate pay increase for some of its roughly 400 IT workers, Brown said.

A report released last week by Foote Partners LLC, a New Canaan, Conn.-based market research firm, found that pay for noncertified and certified technical skills has risen 3.8% and 1.3%, respectively, through the first six months of this year.

Pay raises this year have been particularly strong for people with skills in operating systems (up 8.2%), networking and internetworking (up 5.1%), and databases (up 4.3%), the report said.

The results, which are based on a survey of 1,800 North American and European organizations from April to July 1, suggest that the notion that lower-cost offshore outsourcing led to wage deflation for IT workers may have been overblown, said David Foote, president of Foote Partners.

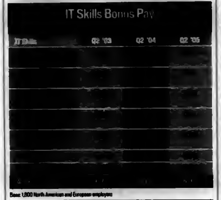
"There's no doubt about the fact that offshoring is continuing to grow," Foote said. But many organizations "have had less-than-ideal experiences" with offshore outsourcing and are concerned about the risks involved, he added.

Supply and Demand

Other factors contributing to the rise in domestic IT salaries include growth in corporate IT project portfolios and additional capital available to compensate high-performing IT workers, said Foote.

Offshore outsourcing consultancy neoIT Inc. has also tracked "moderate growth" in U.S. IT salaries, said Eugene Kublanov, vice president of corporate development at the San Ramon, Calif.-based firm. But, he added, the higher salaries being paid to IT staffers in the U.S. are the result of increased demand, not rising offshore wages.

"Even though salaries offshore are rising significantly in some locations, the base from which they are rising still makes offshore resources quite attractive from a cost perspective," said Kublanov.



IT Skills Bonus Pay

IT Skills
Q2 '03
Q2 '04
Q2 '05

Base: 1,800 North American and European employees

SOURCE: FOOTE PARTNERS LLC, NEW CANAAN, CONN., 2005 HOT TECHNICAL SKILLS & CERTIFICATIONS PAY INDEX, 89 NONCERTIFIED SKILLS FOR THE YEAR THAT ENDED JULY 1, 2005

A lack of U.S. workers with "higher-value technical skills" is a more likely reason for the changes here, he said.

A tighter job market is making it particularly tough for Harrah's Entertainment Inc. to find experienced IT project managers, business systems analysts, data warehousing managers and other specialists, said Tim Stanley, senior vice president and CIO at the Las Vegas-based gaming and hospitality company. Harrah's is looking to fill 25 to 35 IT positions, he said.

Allan McLaughlin, senior vice president and chief technology officer at LexisNexis Group, a research provider in Dayton, Ohio, said hiring requests for IT workers are getting more specific — another factor contributing to competition for technical skills.

LexisNexis has an increased need for networking specialists and plans to expand its five-person IT security team to nine or 10 people over the next six months, said McLaughlin. 55722

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$178B of Baloney

THE BREATHLESS HEADLINE on the press release reads: "$178 Billion in Employee Productivity Lost in the U.S. Annually Due to Internet Misuse." Yow! It turns out that Websense, which sells software for monitoring and blocking what employees do on the Internet, claims that personal use of the Internet on company time is "draining employee output" to the tune of $5,000 per employee per year.

Is that true? Of course not. It's baloney. Never mind the bizarre methodology of Websense's study, which includes guesstimates by IT managers to come up with that $178 billion number.

Just ask yourself this: If they weren't on the Web, would those workers actually produce more "employee output"?

Nope. Not the vast majority of them, anyway. Instead of reading the news online, they'd be paging through a newspaper. Instead of checking personal e-mail or visiting travel or shopping sites, they'd be handling the same communications and tasks on the phone or during stretched-out lunch breaks. They'd just be doing it less efficiently.

Let's face it: Employees who are focused on getting their work done don't need some sort of electronic nanny to make sure they don't wander off into the weeds. For them, the Internet isn't a distraction — it's a tool.

And inveterate slackers who are focused on wasting time will do that regardless — whether it's on the Internet or at the water cooler or walking around, coffee cup in hand.

Management knows that. CEOs understand that personal Web use is just another perk.

Heck, if CEOs actually believed they could boost productivity by $5,000 per employee, they'd slash Internet access tomorrow. Consider Hewlett-Packard, which is laying off 14,500 workers in hopes of chopping $1 billion in costs next year. Do you think CEO Mark Hurd wouldn't cut Internet access to HP employees if he thought that would instantly generate an extra $725 million for HP's bottom line and increase the company's net income by 20%?

Of course he would. And of course he won't. Because, of course, it won't.

So who is this "$178 billion" baloney aimed at? Sad to say, it's aimed at people in corporate IT.

We're suckers for this sort of bunk. Maybe it's because we've generated so many bogus ROI calculations ourselves. Or maybe it's because we're always trying to improve capacity utilization, which is much easier than increasing user productivity.

But micromanaging machines can pay off. Micromanaging users never does.

Besides, we've already got a full plate of real challenges tied to users and the Internet. In comparison, slapping in some nannyware and obsessing over what Web sites to block and when to tattle on offenders is easy and fun.

On the other hand, developing a useful, accessible e-mail archive is hard. Figuring out how to track, log and preserve instant messages is even more difficult. But thanks to lawsuits and government regulations, we need to do both.

Spam isn't getting easier to handle. Worms, viruses, Trojans and spyware are getting nastier. Intruders keep getting more professional. Unprotected home PCs that employees use to log into our networks remain a nightmare. Unsecured wireless access points — in the office or employees' homes — are even worse.

Frank Hayes, Computerworld's senior news columnist, has covered IT for more than 20 years. Contact him at frank.hayes@computerworld.com.

Those are all real problems with real potential costs. If we handle them wrong, they really can drain employee output. And they can cost a lot more than that in fines, lost business and corporate humiliation.

So let's forget the easy, simple-minded distractions. Save the nannyware for kids. Stay focused on helping to squeeze more real productivity out of the way employees use the Internet.

And let self-inflated vendors slice their own baloney — all $178 billion of it. 55701

SHARK TANK

Yes, That Would Explain It

Contractor pilot fish working at a big suburban water and sewer company installs a user's new PC, and when he tests the e-mail client, he discovers more than 3,000 unread messages. Could that be right? "It is," user tells fish. "When I started here a few years ago, the systems people set me up with an e-mail account, but they wouldn't or couldn't give me a computer. People have been sending me messages for a few years, and I've never read or replied to any of them."

How?

Nasty thunderstorm takes out this company's phones, after which support pilot fish soon receives an e-mail from a departmental user: "Cannot obtain a dial tone on telephone internal and/or external. Please call me at extension [illegible] and advise the problem so I can inform other employees who are having the same issue when they arrive this morning."

Bad Sign

New employee at this chemical company is a highly qualified Ph.D., so IT pilot fish figures he shouldn't need a lot of hand-holding. "First thing we did was tell him his telephone extension number," fish reports. "He put on a very strained face and asked if we could perhaps change it to a number that was easier to remember. I couldn't stick around when the discussion moved to selecting network passwords."

Screen-saver

Laptop user on a road trip calls support pilot fish. "She tried to turn her laptop on after having let it fall out of the overhead bin," fish says. "All she gets when she turns it on is a star screensaver." Fish walks her through some troubleshooting, but nothing helps, so he tells her to ship it to him. "I got the package next day," says fish. "The LCD is smashed, right in the center – thus creating a starlike effect."

They Get More?

User calls help desk with a data-entry problem. "He claims the application is penalizing him for trying to enter 17:75 in a time field," sighs pilot fish. "I ask, 'How many minutes are in an hour?' User responds, 'Sixty. But I thought we were supposed to enter it in military time.'"

Well, No

Sales exec buys a Bluetooth-equipped handheld device on her own, and pilot fish sets up the software to let it sync with her laptop. "A week later, I get a call from her. She is 500 miles away in a hotel room, trying to sync with her laptop," fish says. "I ask her if the sync software is running on the laptop. Her reply: 'I'm not sure, can you check? It's in my office.'"

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FRANK HAYES ■ FRANKLY SPEAKING

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But micromanaging machines can pay off. Micromanaging users never does.

Besides, we've already got a full plate of real challenges tied to users and the Internet. In comparison, slapping in some nannyware and obsessing over what Web sites to block and when to tattle on offenders is easy and fun.

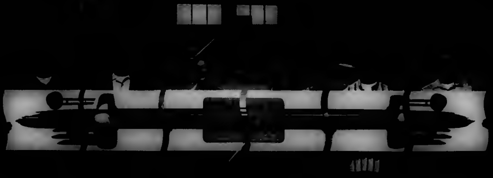
On the other hand, developing a useful, accessible e-mail archive is hard. Figuring out how to track, log and preserve instant messages is even more difficult. But thanks to lawsuits and government regulations, we need to do both.

Spam isn't getting easier to handle. Worms, viruses, Trojans and spyware are getting nastier. Intruders keep getting more professional. Unprotected home PCs that employees use to log into our networks remain a nightmare. Unsecured wireless access points — in the office or employees' homes — are even worse.

Those are all real problems with real potential costs. If we handle them wrong, they really *can* drain employee output. And they can cost a lot more than that in fines, lost business and corporate humiliation.

So let's forget the easy, simple-minded distractions. Save the nannyware for kids. Stay focused on helping to squeeze more real productivity out of the way employees use the Internet.

And let self-inflated vendors slice their own baloney — all $178 billion of it. ● 55701



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